Clinical Remarks
ON
EXPLORATION OF THE BLADDER BY SECTION THROUGH THE PERINEUM.

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ON recently making an examination of a man who had undergone this operation in the hospital, I drew the attention of my class to this particular case, and made some remarks on the proceeding generally as a remedy for those distressing cases of bladder affection which are chiefly marked by excessive irritability of the organ—a condition which, dependent as it is upon various causes, has hitherto been deemed, if not incurable, at least extremely difficult to relieve with effect. Lately, however, this operation of cystotomy, so-called—which is a bad term, as the bladder itself is not cut into,—has been prominently brought forward by Sir Henry Thompson, and has been attended with the best results. I have had several opportunities of putting it in force, the patient alluded to being the last of three who had been in the ward at the same time, and each being entirely relieved of their severe troubles. The principle of the operation consists in searching the bladder by means of an incision carried through the perineum into the membranous portion of the urethra by the middle line, removing any cause of irritation which might be found, such as some morbid growth or undetected stone, and then thoroughly draining the bladder by means of a tube fixed in the opening thus made, and thus giving the organ complete rest. It is somewhat curious that the proceeding in question had not been established long since, as in my own knowledge Sir William Fergusson, upwards of thirty years since, had performed a somewhat similar operation for relief of an extreme case of irritable bladder in an old man, with excellent results. I recollect well Sir William discussing the matter with me before the operation. Like other good things, however, it was laid on one side for a time, but it now bids fair to become a thoroughly established proceeding and to be eminently useful and a credit to surgery.

I wish to say a few words about each of the three cases which have been recently under my care, more especially as, though the operation in each was the same, and performed with the same object, the cases differed somewhat materially.

The man whom I have referred to is between fifty and sixty. He had suffered upwards of six years from extreme irritability of the bladder, for which he underwent various forms of treatment in hospital and elsewhere, without relief. On admission the man was pallid and worn, and presented in a marked degree most of the signs of stone in the bladder, the chief feature, however, being the excessive irritability of the bladder. There was also some induration of the right testis. There was not any stricture, and careful and repeated use of the sound failed to detect any stone. Various means of relieving the intense irritability were used without effect, and it was then determined to explore the bladder. On performing the operation, I was enabled to feel the interior of the organ, which was found to be thickened and contracted, but there was not any foreign body. The relief, as in other cases, was marvellous, the patient, for the first time for years, having passed a tranquil night, and he soon became free from all his sufferings. The tube was retained for several weeks, and was then removed. Some, however, of his symptoms returned, and it was thought advisable to reintroduce and retain it for a few weeks longer, when, the man's health being completely re-established, the tube was removed, with the happiest result. A full-sized catheter was passed three times daily, the actual cautery, by means of a hot wire, was passed into the track of the wound until it was completely healed, and the patient is about to leave the hospital, he having gained considerably in weight. This case, although not so successful in one sense as the other two, inasmuch as it was necessary to retain the tube so long, was in other respects more so, as the poor fellow's sufferings were not only much more intense, but they had existed for a very long period of time, and thus the relief was all the more striking.

The patient in the next case, who has only recently left the hospital, was a man aged thirty-eight, who had suffered much the same as the last patient, but not longer than two years. Many of the symptoms of stone were present, but on sounding him a foreign body could not be detected, and there was not any stricture. Treatment of all kinds had been adopted in a London hospital and elsewhere without relief. The operation was performed in King's College Hospital, with the result of giving immediate relief. The tube was retained only for ten days, the bladder was washed out daily with hot water, a catheter was passed through the urethra three times daily, the application of the hot wire through the perineum closed the wound, and he was discharged well, having been taught to pass an elastic catheter for himself. In this case the result was very satisfactory also, as it was not needful to allow the tube to remain in the wound for a longer period than ten days. This was due to the fact of the symptoms not having lasted anything like so long as in the case previously detailed.

In the third case the operation was performed in a similar manner, but not for the same condition of things as obtained in the other men. The patient, who was a dissipated costermonger, aged fifty-five, well known at the hospital both from his distorted visage and frequent attendance, had suffered from severe stricture for years, and had been under treatment at various times, with the result of producing great relief; but he neglected himself, and retention, atony of bladder, turbid urine, and re-contraction of the urethra supervened. This condition occurred in the last autumn, and he was admitted into the hospital. After some weeks he was dismissed, with his urethra well dilated. He, however, again neglected himself during the severe winter, and was readmitted in February, when it was found that, although a good-sized catheter could be passed, the man could only expel a very small quantity of turbid urine at a time, and, moreover, he could not pass any except in the sitting posture. The treatment consisted in emptying the bladder thoroughly every few hours with the catheter, but the only benefit resulting was an improvement in the condition of the urine. The operation was therefore determined upon with the view of exploring the bladder and thoroughly draining it, for it was surmised that something would be discovered which acted as an impediment to the passage of urine except in the sitting posture. On performing the operation and introducing the finger into the bladder, it came into contact with what appeared to be a prominent fold of hypertrophied mucous membrane on the left side, but not distinctly circumscribed or pendulous. A tube was introduced and fixed, and thus the bladder was kept thoroughly empty. Some serious bleeding occurred a few hours afterwards, and it was thought advisable to introduce a tampon, which was retained for two days. The original tube was reintroduced, and taken out at the end of two weeks. A catheter was passed by the urethra twice a day, and the bladder was washed out daily with hot water. Six weeks after the operation urine ceased to come by the wound. In another ten days the patient was able to pass his urine freely whilst in the erect posture, and shortly afterwards was discharged well.

The cases referred to, with others which have undergone this operation, show what a valuable resource the surgeon has in the treatment of these severe affections of the bladder, and it may be resorted to as a means merely of giving relief in those instances where very severe suffering is produced by malignant disease of the bladder, and where nothing in the way of ordinary treatment is of any service. The operation itself, if cautiously and deliberately executed, as all procedures in connexion with these parts should be, is neither difficult nor dangerous. The membranous portion of the urethra should be struck and freely opened so as to admit the point of the left forefinger, which is slowly and without force insinuated through the wound into the bladder, when, with care, the whole of the interior of the organ can be examined, and for the avoidance of bleeding as large a tube as possible should be introduced and fixed. Of course, if any foreign body, such as a stone or morbid growth, be detected, it is to be removed by avulsion or extraction.

CLINICAL OBSERVATIONS
ON THE
ACTION OF ANTIPYRIN AND THALLIN.

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THE following observations on the action of Antipyrin and Thallin were made at the suggestion of Dr. Ringer on patients admitted under his care into University College Hospital. My main object has been to investigate the utility of these drugs in the treatment of acute articular rheumatism, and to compare their action with that of Salicylate of Soda. Notwithstanding the voluminous literature on this subject which has appeared during the last few years, further observations would seem to be desirable when we consider the somewhat conflicting opinions at which different observers have arrived. After the admission of a case of acute rheumatism, no drug, or merely a placebo, was given for the first twelve or twenty-four hours. By so doing any error due to the simple effect of complete rest on the temperature was as far as possible avoided. The fall of temperature from this cause is often not inconsiderable, amounting in some cases to one or two degrees Fahrenheit. Dr. Ringer points out that the first temperature taken after admission is often the highest. The administration of the drug was then commenced, and in those cases in which it did not appear to be beneficial it was followed by the administration of the salicylate of soda. The following are brief details of some individual cases:—

Cases of Acute Rheumatism treated with Antipyrin.

CASE 1.—T. R——, aged twenty-two, was admitted on Oct. 12th, 1885, with his first attack. The right elbow and wrist were swollen, red, and very painful, and the left shoulder was painful on movement. There was a faint systolic murmur at the apex. During the twenty-four hours after admission the temperature varied between 100° and 101·4°. At 3 P.M. on Oct. 13th (day after admission) twenty grains of antipyrin were given, and repeated at 4 P.M. and 5 P.M. The temperature fell gradually from 101·4° at 3 P.M. to 98·4° at 12 P.M.; the physical condition of the joints remained the same, but the pain was rather less. On the following day at 11 A.M. the temperature had risen to 100·4°; twenty grains of antipyrin were given, and repeated every two hours until 6 P.M., the result being a fall to 98° at 7 P.M., without the slightest effect on the symptoms. At 3 A.M. on Dec. 15th the thermometer rose slowly to 99·8° at 11 P.M. At 11 A.M. on the following day twenty grains of salicylate of soda were given, and repeated at intervals of two hours. The result was a fall from 99·8° at 11 A.M. to 97·8° at 3 A.M. on the following morning (Oct. 17th), when "the pain had all gone" and the swelling subsided. The temperature remained normal, and recovery was rapid. In this and all other cases the salicylate was continued in gradually diminished doses until at least one week after the temperature had fallen to normal.

CASE 2.—F. J——, aged seventeen, was admitted to the hospital on Dec. 7th, 1885, with his first attack. Both wrists and both knees were swollen and painful, the right shoulder was painful, and there was a soft systolic murmur at the mitral area. The temperature at 3 P.M., shortly after admission, was 102·2°; it fell to 99·8° at 11 A.M. on Dec. 8th without treatment, and at noon was 100·2°. Twenty grains of antipyrin were then given, and repeated hourly until 6 P.M. Two hours after the first dose the temperature was 99°, and fell quite uniformly to 96° at 10 P.M. The pulse fell from 66 to 60. There was no increase of sweating, and no prostration; the symptoms remained unchanged. The temperature rose to normal at 11 A.M. on the following day, and the antipyrin was not repeated. The joints were rather less painful, and the right wrist less swollen. On the following day at noon (temperature 98·4°) twenty grains of salicylate of soda were given, and repeated every three hours. Towards evening the pain became much less, and the next morning was gone, and all swelling had disappeared. The temperature remained normal. During his stay in the hospital signs of slight aortic disease developed, but no cardiac symptoms were present.

CASE 3.—F. B——, aged nineteen, was admitted on Dec. 1st, 1885, with his second attack. The left elbow and wrist and the left knee and ankle were affected. The temperature at 11 P.M. (twelve hours after admission) was 101·8°. Twenty grains of antipyrin were administered, and repeated at 12 P.M. and 1 A.M. The temperature fell slowly to 99·2° at 7 A.M. on Dec. 2nd. The right elbow and wrist had during this time become swollen and painful, so that the antipyrin was not repeated; but at 3 P.M. salicylate of soda was ordered in twenty-grain doses every two hours, with a resulting fall to normal at noon on the following day, and a complete alleviation of the symptoms. On admission a systolic murmur was audible at the apex, and on Dec. 5th a diastolic murmur was for the first time heard at the base; but there were no cardiac symptoms, and on Dec. 16th the patient left the hospital quite well.

CASE 4.—H. S——, aged thirty-one, admitted on Oct. 8th, 1885, with his second attack. Right wrist and both knees and ankles affected. No signs of heart affection. At 11 P.M. on the day of admission the temperature was 102·6°. At 3 A.M. on the following morning the salicylate of soda was commenced in twenty-grain doses every two hours, with a resulting fall to 99·4° at 7 A.M. The symptoms were, however, scarcely affected. On the following day severe headache and buzzing in the ears having developed, the salicylate was only given every four hours. The temperature on the 12th rose again to 102°. During the fortnight after admission this treatment was continued without success, and the swelling of the knee-joints became very great. Blistering was tried with some benefit. On Oct. 23rd, at 11 A.M., the thermometer registered 101·6°, and twenty grains of antipyrin were given at 3 P.M., and repeated at 4 and 5 P.M.; at 7 P.M. the temperature was 98·4°. On the following day (Oct. 24th) ten grains were given every two hours. The temperature did not rise above 99·4°. The dose was gradually lessened, and the various affected joints were blistered. On the 28th the swelling of the knees had quite disappeared, and after this the patient made a steady though slow convalescence.

Cases of Acute Rheumatism in which Thallin was employed.

CASE 1.—E. S——, aged thirty-five, was brought to hospital with her second attack on Dec. 29th, 1885. Both wrists, both ankles, and the left knee were affected. The temperature on admission was 100·2°; at 1 P.M. on the following day, 102·6°. Thallin was then commenced—one grain of the sulphate every hour. The temperature fell steadily to 100·6° at 6 P.M., and then rose to 101·6° at 9 P.M. At 10 P.M. the dose was increased to two grains hourly, after which the temperature fell with slight fluctuations to 98·8° at 9 A.M. on the following morning (Dec. 31st); it then began to fluctuate between 98·8° and 100·4°. (The temperature was taken hourly.) The symptoms were absolutely unchanged. At noon the dose was increased to three grains hourly, and at 4 P.M. 99° were registered. After the next four doses the patient vomited, so that the drug was stopped at 8 P.M., the temperature standing at 100°. At 3 P.M. on the following day the salicylate was commenced in twenty-grain doses every two hours. The same evening the symptoms were much lessened, and on the next morning they had disappeared and the temperature was normal. The patient made a rapid recovery. No cardiac complications developed.

CASE 2.—J. T. G——, aged twenty, was admitted on Dec. 21st, 1885, with his first attack. Had right hemichorea when fifteen years old. Both knees and ankles and right shoulder affected. Apex systolic murmur, and pericardial rub audible. Temperature on evening of admission 102·8°; at 11 A.M. on next day, 102·2°. Thallin then commenced, one grain hourly. Temperature at 6 P.M. 100·8°; at 11 P.M., 101·4°. Dose increased to two grains hourly. The temperature fell uniformly to 98·8° at 2 A.M. on next morning (Dec. 23rd), and then rose with considerable fluctuations to 101·8° at 8 A.M. No improvement was noticed in the symptoms, and both wrists had become swollen and painful. The thallin was stopped at 8 A.M., and at 8 o'clock P.M. the thermometer stood at 102·4°. The salicylate of soda was then given—twenty grains every two hours. At 3 A.M. on the following morning the temperature was normal, and at 11 A.M. the patient expressed himself quite free from pain, and the swelling had entirely subsided. The pericardial rub disappeared on the third day after admission, and no fresh murmurs presented themselves. He was discharged on Jan. 5th. During the administration of the thallin the urine assumed a dark olive-green colour and smelled strongly of

the drug. Ferric chloride gave a dirty-brown precipitate soluble in excess to a dark reddish-brown solution. This effect on the urine was almost constantly noted. It rapidly disappeared when the drug was stopped.

CASE 3.—S. G——, aged forty-five, was admitted on Dec. 18th, 1885, with his third attack. There was affection of both elbows and wrists, and to a less extent of the knees and shoulders. Temperature on admission 102·2°; at 9 A.M. on the following morning, 101·4°. One grain of sulphate of thallin was given every hour, until 6 P.M., when the temperature was 99°. It was then stopped on account of the great nausea it produced and the copious sweating which occurred. It had no effect on the joint symptoms. At 11 A.M. on the next day twenty grains of the salicylate were ordered every two hours; the temperature was then 99°, and was normal three hours later. Rapid removal of symptoms followed and recovery was uninterrupted.

Professor Dujardin-Beaumetz of Paris, after an extensive trial of antipyrin, concluded that when used in acute rheumatism it brought down the fever, but did not materially affect the joint symptoms. Many other observers, including Neumann of Berlin,[1] and Pribram,[2] have considered the drug equal to the salicylate in rheumatic fever. My own experience, although very limited, certainly coincides with the first opinion—viz., that antipyrin cannot claim any specific action in rheumatism. An important fact clearly brought out by the above cases is that after the temperature has been reduced to normal by the antipyrin, the other symptoms of the disease are rapidly removed by the administration of the salicylate; this, it seems to me, indicates a marked difference between the former, which merely removes one symptom of the disease—viz., the fever,—and the latter, which appears to strike at the root of the mischief. Case 4 is an example of those unusual cases in which the sodic salicylate failed. Here antipyrin appeared of some service, and in such cases, as well as in those attended with hyperpyrexia, the drug deserves further trial. In none of the cases of rheumatism in which antipyrin was given did it produce any of the toxic effects—vomiting, prostration, &c.—which have been described as resulting from its use, and some of which have occurred in cases at University College Hospital. With regard to thallin, the general opinion of those who have employed it seems to be that it compares very unfavourably with salicylate of soda in the treatment of acute rheumatism. Thus, Dr. Jaksch[3] found that although the fever was reduced by its action, yet the other symptoms all remained. The above cases tend to confirm this conclusion. The considerable extension of the disease which occurred in Case 2 during the exhibition of the drug, notwithstanding the lowering of the temperature, would be inexplicable were we to believe that the antipyretic effect was due to any influence of the thallin on the disease process itself. The frequently repeated doses necessary, and the very transient effect produced, compel us to consider thallin very inferior to antipyrin, notwithstanding slight advantages, such as rapidity of action, which it may possess. We must therefore conclude that salicylate of soda remains *par excellence* the cure for acute rheumatism, but that antipyrin may be useful in those rare cases in which it fails to exert its apparently specific action on the disease.

I will now proceed to give brief details of a few cases of Phthisis in which Thallin and Antipyrin were employed.

CASE 1.—C. Q——, aged seventeen years and a half, was admitted on Oct. 10th, 1885, with a severe attack of hæmoptysis. He had had a cough for nearly three months, and once before had spat blood, on Sept. 30th. He had several attacks of hæmoptysis during the few days after admission, and was treated with ergotine, gallic acid, &c. There was evidence of consolidation at the right apex. During the week after admission the average morning temperature was about 102° and the evening temperature between 102° and 103°. On Oct. 19th, at 11 A.M. twenty grains of antipyrin were given, and repeated at noon and 1 P.M. There was a fall from 101·4° at 11 A.M. to 98·4° at 11 P.M. At 12·30 A.M., the temperature having risen to 100·2°, ten grains of antipyrin were ordered every three hours. This was continued for two days, and the thermometer only once registered 100°, standing usually at 99°. On the day after it was stopped the evening temperature was 102°. On Oct. 26th three hourly doses of from ten to twenty grains were given. The temperature fell from 102·6° to 99·2° in five hours. Shortly after the third dose the patient became very collapsed, the extremities very blue, the pulse small and fluttering, and there were marked tremors in the limbs. This condition lasted about an hour, and he gradually revived after brandy with ammonia and ether had been given freely. Fifteen hours after the last dose the temperature was 96·4°, and then slowly rose, without shivering, to 100·2° during the next seventeen hours. Death occurred on Oct. 30th, and the necropsy revealed extensive disease of both lungs. During the few days that antipyrin was given in ten-grain doses every three hours the night sweats were certainly lessened, but no other improvement was evident in the general condition.

CASE 2.—D. W——, aged twenty-one, was admitted on Jan. 18th, 1886, with a history of severe cough, rapid wasting, and night sweats of five weeks' duration. There was evidence of consolidation and small vomicæ at both apices. During the three days after admission the morning temperature was 101·2°, 100·4°, and 100·4°, and that of the evening, 103·8°, 102·8°, and 103·6°. On Jan. 22nd, at 6 P.M. 105·2° was reached, and at 7.30 P.M. thallin was commenced in one-grain doses every hour; this was doubled at 10.30 P.M. At 5 A.M. on the next day the temperature was 99·4°, and rose rapidly, with severe shivering, to 105° at 9 A.M., although thallin was continued. During the day the lowest record was 100°, and the highest was 105°. At 12 P.M., with violent sweating, the temperature fell to 98·4°, and the thallin was stopped on account of vomiting. In four hours a rise of 5° occurred. During the next three days variations between 102° and 104° were registered. On Jan. 27th, at 10 A.M. (temperature 102°) twenty grains of antipyrin were administered, and repeated at 11 A.M. and noon. The thermometer at 1 P.M. was 97·2°. A rise without shivering followed, 104·2° being reached at 7 P.M.—7° in six hours. The drug was then ordered in twenty-grain doses every four hours. This was increased on Jan. 30th to twenty-grain doses every three hours, and continued until Feb. 5th. The chart during this time showed great daily variations—from 97° and 99° in the morning to 103° and 104° in the evening. The sweating was increased, but no other ill effects were noted. Stopping the drug had a marked effect on the temperature chart, which showed that although the evening rise remained the same (103°-104°), the morning fall was about 2° less (100°). The lung disease rapidly extended, symptoms of peritonitis and persistent diarrhœa set in, and the patient died on Feb. 27th. Cavities at the upper part of both lungs were found; there was general peritonitis and extensive tubercular ulceration of the small intestine.

CASE 3.—H. G. F——, aged twenty, had suffered from severe cough and night sweats, and had been wasting during the three months before his admission on Dec. 31st, 1885. There were signs of a considerable cavity at the apex of the left lung, and consolidation of the right apex. Expectoration profuse, muco-purulent. Patient very weak and emaciated. Morning temperature during first three days in hospital 100°-101°; evening, 102°-103°. At 11 A.M., on Jan. 3rd, 1886, thallin was commenced in one-grain doses hourly. At 5 P.M. the temperature was 98°, and at 9 P.M. 103·4°. Similar fluctuations continued, and on Jan. 5th the dose was doubled. The result was a temperature varying between 98·4° and 101·6°. At 11 P.M. on Jan. 6th the thallin was stopped, and the temperature rose in four hours from 100° to 103·6°. On Jan. 12th, three fifteen-grain doses of antipyrin were given at intervals of one hour. The temperature fell from 101° at 11 A.M. to 99·8° at 3 P.M., and then rose to 101·6° at 5 P.M. On Jan. 13th fifteen-grain doses were ordered every four hours. On the next three evenings 101° were registered. After this, until Feb. 25th, the morning temperature was usually normal, and the evening about 99·6°, rarely touching 100°. On three consecutive days during this time no antipyrin was given, and the evening temperature reached 101°. The general condition improved, the night sweats became very slight, and the expectoration less abundant. The cavity at the left apex showed distinct signs of drying up, the râles became much fewer, and the upper intercostal spaces became depressed. On Feb. 25th the patient left for Eastbourne, much improved, and having gained several pounds in weight during his last month in the hospital. During several weeks after leaving the hospital he continued to take three fifteen-grain doses of antipyrin daily. Whilst he remained under observation the evening temperature varied between 99° and 99·6°.

With regard to thallin it may be stated that in the above

[1] Klin. Wochenschrift, Sept. 14th, 1885.
[2] Prager. Medicinische Wochenschrift. Oct 1884.
[3] Wien Med. Wochenschrift, 48, 1884.

and other cases of phthisis in which it was employed no appreciable benefit resulted. The almost constant effect on the temperature was a great increase of the daily variations, the minimum temperature being often lowered by 2° or more, whilst the maximum remained the same. Each fall of temperature was accompanied by sweating, and each rise frequently by shivering, and not rarely by distinct rigors. These necessarily added considerably to the discomfort of the patient. I can find no records of cases of phthisis benefited by the use of thallin. The very good result obtained by the continued administration of antipyrin in the last case recorded above agrees with similar results obtained by other observers. In the *Practitioner* for May, 1885, Dr. Holland, of St. Moritz, gives details of several cases which were materially improved by the use of antipyrin, after quinine, salicylic acid, digitalis, and other antipyretic drugs had failed. In one of his cases vomiting was produced. Two similar cases were described in a paper read by Dr. Macalister before the Cambridge Medical Society on August 7th, 1885. The sweating produced was counteracted by the use of minim doses of the solution of sulphate of atropine. In my case the sweating was greatly lessened, and cases recorded by Huchard showed a similar result. In Case 1, recorded above, some slight benefit was derived from the administration of antipyrin, but in three other cases, of which I have notes, no benefit was obtained. The conclusion to which we are led seems to be that the effects of antipyrin in phthisis vary in different cases. In some it acts no better than thallin, and merely lowers the temperature without improving the general condition of the patient or retarding the course of the disease; whilst in other cases it is of great benefit—lowering the temperature, lessening the night sweats, and improving the nutrition. Whether the antipyrin thus acts by merely removing those conditions which are secondary to long-continued fever, or whether it has any more direct action on the disease-process, remains to be shown. The hæmostatic action which has been attributed to antipyrin by several experimenters has suggested a possible further recommendation for its use in phthisis when accompanied by hæmoptysis. It may perhaps be worth mentioning that in Case 1 the severe hæmoptysis was not apparently lessened by full doses of antipyrin.

The most important difference between these two drugs, which is demonstrated by almost all the cases in which they were used, is in the duration of their effects. The lowering of the temperature produced by antipyrin lasts usually for many hours. In one instance the temperature did not rise above 98·6° for thirty hours after the drug was stopped. The rise is gradual and occupies several hours. Thallin, on the contrary, produces a very transitory effect, the rise often beginning within two hours after stopping the drug. This rise is very rapid, and hence is often accompanied by shivering. The influence of antipyrin and thallin on the pulse and respiration appears to me to be very slight. The pulse is usually only slowed by a few beats per minute. In one case, in which antipyrin produced a fall of temperature from 100·2° to 96°, the pulse was only slowed by four beats per minute, and the rate of respiration was unaltered. The experiments of Dr. K. Bettelheim, made in the laboratory of Professor v. Basch at Vienna, led him to a similar conclusion. Professor Pribram,[4] however, considers that antipyrin has a marked effect on the pulse and respiration.

The various toxic effects produced must now be briefly considered. Vomiting has been frequently noted after the use of antipyrin; much more rarely after thallin. In two cases at University College Hospital antipyrin produced severe vomiting: once in a girl aged twelve years suffering from typhoid fever, after fifteen-grain doses; once in a case of phthisis after twenty-grain doses. The same symptom occurred after the administration of thallin in three-grain doses to a patient with rheumatic fever, who was similarly affected by salicylate of soda. In one other case, nausea, but no vomiting, followed the drug. During the administration of these drugs symptoms of collapse were carefully watched for. In the first case of phthisis detailed above, marked prostration followed the use of antipyrin in three doses of ten, twenty, and twenty grains respectively. Similar symptoms were observed in a boy to whom three fifteen-grain doses were given at intervals of one hour. In no case did thallin occasion any prostration. Looking to the literature on the subject, we find reference made by several observers to cases in which prostration appeared to follow the use of antipyrin. In THE LANCET of Feb. 28th, 1885, a case was recorded by Mr. Blore, of the Leeds Fever Hospital, in which extreme collapse, terminating fatally, followed the administration of antipyrin, and he concluded "that the extreme depression accompanying the fall of temperature was directly due to the action of the drug." The sweating which accompanies the fall of temperature appears to vary considerably in different cases. As a rule it is not marked, and causes no inconvenience, but in the two cases in which antipyrin caused collapse the fall of temperature was attended with very profuse sweating. In their tendency to produce shivering or rigors the two drugs differ. This we should expect from a comparison of the rapid rise following the fall produced by thallin with the gradual rise after antipyrin; and all observers seem agreed that shivering and rigors frequently follow the use of thallin, but rarely of antipyrin. In every case of phthisis in which thallin was employed for any length of time shivering frequently accompanied the rapid variations in temperature. In one instance a severe rigor, lasting nearly an hour, occurred during the use of one-grain doses hourly. The temperature rose from 100° to 104·8° in two hours. In the case of typhoid fever above mentioned a similar effect was produced. One grain of thallin was being taken every hour on the twenty-first day of the disease. The temperature rose from 101·8° at 9 A.M. to 105° at 2 P.M., and at 1 P.M. a rigor commenced, and lasted for thirty minutes. An exanthematous eruption following the administration of antipyrin was first described by Dr. Ernst of Zurich, and has been seen by many other observers. Thallin more rarely causes a similar rash. This eruption occurred in the case of the boy mentioned above, in whom symptoms of collapse followed the use of three fifteen-grain doses of antipyrin. The rash appeared about one hour after the last dose was given. It consisted of small rosy-red spots over the chest and abdomen, and to a less extent on the limbs. On the face and neck the rash was confluent, and closely resembled scarlet fever. It lasted about an hour, and then gradually faded away. The peculiar appearance of the urine in patients taking thallin has been already mentioned, and constantly occurred. It closely resembles that so often seen in the surgical wards from the absorption of carbolic acid.

Taking all things into consideration, it seems to me that the evidence is strongly in favour of antipyrin. Any slight advantages which thallin may possess are more than counterbalanced by the transitory nature of its action, the frequently repeated doses which are therefore necessary, and the great liability to the occurrence of shivering or rigors. This conclusion agrees with that of most German observers. Unless, therefore, future investigations shall disclose some yet undiscovered advantages in thallin, we may, I think, decide to employ antipyrin in preference to it in any case in which a rapid antipyretic effect is desired. Still more is antipyrin to be preferred in cases such as phthisis, where a long-continued use of the drug is necessary. Regarded as a purely symptomatic remedy, the unanimous verdict is that antipyrin is a most efficient agent.

In conclusion, I beg to offer my best thanks to Dr. Sydney Ringer for allowing me the opportunity of carrying out these brief investigations whilst acting as his house-physician at University College Hospital.

[4] Prager, Med. Woch., October, 1884.

THE MORTUARY QUESTION IN LONDON.—At an inquest held on the 21st inst. at Fulham on the body of a domestic servant who had committed suicide, it was pointed out that in this extensive parish there was no public mortuary. In the present case, the body of the deceased, who had been suffering from an infectious disease, had to be taken to the mortuary of the adjacent parish at Hammersmith. Now that the attention of the authorities has been directed to such an anomaly, it is to be hoped that the want will speedily be supplied.

NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—At a meeting of the members of this Association on the 19th inst., Dr. Hime, who has had occasion twice to visit M. Pasteur in Paris, delivered an address on M. Pasteur's treatment of persons liable to hydrophobia, and explained the processes of inoculation adopted by that scientist in his experiments. At the conclusion of the address, Dr. Tatham moved a vote of thanks to Dr. Hime, which was seconded by Dr. Wills and cordially passed.

ON

THE CAUSATION AND NATURE OF HYPERTROPHY OF THE PROSTATE.

By REGINALD HARRISON, F.R.C.S.,

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In a previous paper[1] I have pointed out that residual urine will be frequently found to precede physical signs of prostatic enlargement, and that this inability to empty the bladder may be traced to structural alterations in shape and imperfect power of contractility which chiefly involve the most dependent portion of the bladder area—namely, the posterior wall. From these observations I deduce that the initial lesion in enlargement of the prostate is the conversion of the latter into a kind of muscular buttress for providing against a structural incapacity in a contiguous part. I have further laid stress on the view which has been advanced by competent observers that the prostate is to be regarded essentially as a muscle, and not as a gland, in the ordinary acceptation of the term. In endeavouring to explain how it is that the prostate muscle may be brought under the influence of the same laws which seem to regulate the development of hypertrophies in other parts of the body, and which for the most part are compensating in their nature, there are many points connected with its clinical history and pathology, when enlarged, which may with advantage be referred to here.

In the examination of the bladder, both after death and in the course of surgical operation, it is impossible not to be struck with the altered relations which frequently exist between the viscus itself and its neck or outlet. In early adult life the bladder may be regarded as an abdominal rather than a pelvic organ; as years advance it gradually sinks within the pelvis, whilst still later on it will often be found to have become further depressed within the pelvic cavity. In this way I have seen a prominence given to the floor of the prostate what was really due, not to the development of more prostate tissue, but to the bending back of the posterior wall of the bladder. When it is considered that the prostate is almost immovably fixed by ligament in its position, whilst the bladder can rise or fall according to circumstances, it is not difficult to understand how this can be, and how an obstacle may be put in the way of micturition which does not necessarily involve an increase in the amount of prostatic tissue. This mode of forming a prostatic bar may be very readily imitated. That an undue sinking of the bladder within the pelvis such as I have referred to would be likely to induce hypertrophy of the prostate as a compensating process seems to me to be not unreasonable. It is stated by Sir Henry Thompson[2] "that actual hypertrophy of the prostate exists in about 34 per cent. of men at and above sixty years of age; that it produces manifest symptoms in about 15 or 16 per cent." From this it would appear that 18 per cent. are not injuriously affected by this change, a circumstance which almost seems to suggest that the majority of persons with large prostates are in some way or other benefited by them. These are illustrations where the compensation is precise. How frequently it happens in our daily practice that we come across instances of persons having very large prostates, but who are not conscious of suffering any inconvenience thereby. It is only very recently, when examining the rectum of a patient, I discovered that he had an enormous prostate, but beyond experiencing some degree of vesical irritability a few years ago he had now nothing to complain of so far as micturition was concerned. A good idea of the amount of support that is afforded to the most dependent portion of the bladder by a large prostate may be formed by examining such a patient as I have just referred to with the finger in the rectum when he is placed in the erect position. By this means we can judge of the value—I was going to say the comfort—of a large prostate to some elderly males with incompetent bladders.

But it may be urged that, though some cases of enlarged prostate appear capable of explanation on the ground that they are essentially hypertrophies in the usual acceptation of the term, there are others where such an explanation is not so apparent. In the latter category reference no doubt will be made to those instances where the prostatic mass is made up of more or less lobulated projections. These I would speak of as the upheavings of a frequently contracting muscular ring. In a muscle or part undergoing hypertrophic growth, and where the process is prompted by circumstances which are obviously liable to some degree of variation, tissue production may be excessive or become unnecessary. Such excess would naturally tend, under the contraction of the part, not only to protrude itself where the resistance was least, but to assume a more lowly organised form than that originally produced. In this way I believe these masses of more or less degenerated prostate tissue are formed, and just as there is a wide difference between the irritability of the bladder associated with the initial stage of the hypertrophying prostate and that caused by the fibrous projections of the gland just referred to, and which produce symptoms quite as irritating to the bladder as any stone, so is there a corresponding difference in the residual urine which accompanies each of these states. In a paper by Mr. Savory[3] on the Relation of Partial Retention of Urine to its Decomposition within the Bladder, he points out that the mere retention of a certain quantity of changing urine, though constantly occupying the bladder, cannot be regarded as explanatory of its decomposition. Because a bladder does not completely empty itself, as in the initial stage of prostatic hypertrophy, this by no means implies that what it contains is stagnant and liable to decomposition. A constant stream, though a small one, through a standing pool of water ensures sufficient interchange to prevent putrescence or anything approaching it. So long as normal urine enters a bladder capable of expelling, though incompletely, so long will what is retained remain unchanged, provided that nothing is brought in relation with the interior of the bladder which can act the part of a foreign body. A prostate with fibrous outgrowths is positively more irritating to the interior of the bladder, more productive of cystitis and mucous exudation, than almost any calculus that can be met with. It is under these circumstances that we have a very different form of residual urine to that previously alluded to. In practice it is necessary that these distinctions should be recognised.

A few words, in conclusion, may be devoted to certain pathological conditions of the prostate as bearing upon the remarks that have been already made, and relative to its uses other than as a muscle. The only form of inflammation to which the normal prostate, so far as my experience goes, is liable, is that which primarily involves its numerous follicles; by the suppuration and coalescence of these follicles the whole area of the prostate may be converted into an abscess. Though I have known several instances in adults about the age of puberty, where the secreting portion of the prostate must in this way have been completely and permanently damaged, I cannot say that I ever knew such a suppuration followed by either sexual or procreative inability. And though the prostate may not be damaged to the same extent, in most cases of lateral lithotomy and operations of a like nature, if it were essential to procreation, we might expect to find a certain number of fairly well authenticated cases where this function was thus brought to an end. My experience of these operations, which has been tolerably large, does not furnish grounds for believing that the procreative power has been interfered with by them. That so important a function should, as it were, be made dependent on the integrity of two organs situated at a distance from each other seems on the face of it to be unlikely. It appears to me that the office of the prostate relatively to the sexual act is that referred to by Dr. Handfield Jones[4] in the following passage:—"These considerations furnish some ground for regarding the prostate as rather an assemblage of mucous follicles than really a distinct conglomerate gland; its part in the generative function is probably not to prepare any essential element of the fecundating fluid, but merely an appropriate viscid material, involved in which the seminal animalcules may be more securely transported on their destined route." The wide difference that exists in the pathology of the prostate and the testis seems to point, I submit, to their being engaged in very different functions; the former comprehend those changes which we might

[1] THE LANCET, March 6th, 1886. [2] Diseases of the Prostate.

[3] THE LANCET, Oct. 14th, 1882.

[4] The London Medical Gazette, vol. v., 1847.

expect in a part consisting of follicles embedded in muscle, whilst in the latter they are those which can only happen to a highly organised gland where everything is subservient to the secreting process. I should sum up the function of the prostate relatively to the sexual act as supplying a reaction which mechanically enables the fecundating fluid to act with greater certainty, at the same time supplying a muscular buttress against which the ejaculatory muscles of the urethra may advantageously act in the emission of the semen.

In a future communication I hope to refer to certain clinical points arising out of the views I have expressed in connexion with this subject.

Liverpool.

CASES OF POISONING BY SQUILLS.[1]

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ON March 2nd, 1886, I received for analysis a bottle with fluid contents, in relation to the following cases:—

Three in a family of children had had whooping-cough, and their mother had given them a mixture obtained from a chemist (Mr. A.), and composed as follows: Ol. amygdal. 3ij., syrup. violæ 3ivss, vini ipecac. 3iss, syrup. scillæ 3j, and containing, therefore, half its volume of syrup of squills. The three children, Isaac, Ethel, and Thomas, had taken teaspoonful doses of the mixture twice a day for ten weeks, a fresh supply, consequently, being required rather oftener than twice a week. A fourth child, Lilian, was not suffering from whooping-cough, and her mother only gave her a teaspoonful from the last bottleful, altogether.

On Feb. 17th, Dr. Mutch, of Sneinton-road, Nottingham, was called in to see Isaac, aged three years and a half. He complained of pain in the legs, and of their giving way; during the night he had slight difficulty of breathing.—18th: He took a hearty breakfast, and seemed in his usual health, until about 11 A.M., when his mother noticed him looking pale. Dr. Mutch saw him at 4 P.M., when his skin was pale generally, his eyes sunk, his face pinched, his lips and finger-nails livid, his respiration quick, and there were mucous râles at the front and back of the chest; the pupils were normal. Death occurred at 11 P.M.

On Feb. 23rd Dr. Mutch was called in again to see Ethel, aged five years. She was out of doors on the 22nd, and complained of her legs giving way; she fell several times, and vomited at intervals. When Dr. Mutch saw her, her eyes were rather sunken, her face was pale, the respiration and temperature were normal, there was no lung symptom, the pulse was irregular, intermitting one in four beats, and the pupils were normal. She complained of pain in the legs, and still had slight attacks of vomiting.—24th: The pulse was the same; lips livid.—25th: Eyes more sunken, face paler, temperature normal, pulse (?) She was cheerful and took nourishment well.—26th: Breakfasted; seemed better and more cheerful, but died suddenly about 11 A.M.

In consequence of the supervention of the second death, Dr. Mutch's suspicions were aroused, and he declined to give the death certificate. An inquest was held, and the coroner ordered a post-mortem examination to be made on the body of Ethel. This was performed by Dr. Mutch, in the presence of Dr. Brookhouse, Mr. Buckoll, and Mr. Cooper, on Feb. 28th, forty-eight hours after death.

Post-mortem examination.—Rigor mortis well marked, much hypostatic congestion, nails black, eyes sunken. On opening the thorax, the lungs were found to be rather pale, but filled the pleural cavities; there were no adhesions; the posterior borders of the lungs were congested, but otherwise the lungs were healthy; there was no accumulation of mucus in the bronchial tubes. The left ventricle of the heart was contracted and empty, the right ventricle was empty, the pericardium was healthy, and there was no effusion in its cavity. The liver was healthy, the gall bladder distended. The intestines were normal, and there was no peritonitis. The stomach contained a small quantity of food; there were a few inflammatory patches on its anterior surface and lower border internally. The blood throughout the body was fluid and dark, and there was no clot to be seen.

A third child, Thomas, aged six years and a half, was seen on Feb. 27th, when he was lying tranquilly in bed, his facial expression not being at all a distressed one. Pulse 104 per minute, intermitting 1 in 4; respiration 24 per minute. There was free diaphoresis, partly caused perhaps by the linseed poultices that had been applied. He had vomited last about twenty-four hours previously; tongue clean and red. He took his last dose from the bottle of medicine at 5 A.M. of the preceding day, the 26th. The pulse intermitted 1 in 4 on the 27th and 28th, 1 in 14 on the 29th, and 1 in 20 on the 30th, and continued to vary for a week. The medical men who were present at the post-mortem saw this case, and agreed that the symptoms were due to some cardiac poison.

Lilian, aged eight, the only one of the four who did not have whooping-cough, had only one dose of the mixture for a little attack of coughing. This dose she had at 5 A.M. of Feb. 26th. This was followed by vomiting; she became languid and drowsy about 10 A.M., and complained of pain in her legs; her pulse intermitted 1 in 14. On the 27th she was tranquil, and had no symptom except a very occasional intermission of the pulse. This was shown by the pulse-beat varying from 24 to 26 per quarter minute. This observation was made six times in consecutive quarters of a minute.

The preceding history of cases, and of the post-mortem examination, I owe entirely to the kindness of Drs. Brookhouse and Mutch, who furnished me with notes of the same.

Chemical and physiological examination.—In consequence of a wish expressed by the coroner's jury, the remainder of the mixture that had been given to the children was handed to me, with a request that I should examine it for digitalis, or other heart poison. At the post-mortem the heart was found to have ceased in systole; this phenomenon is a result of poisoning only in the case of three drugs in the British Pharmacopœia list, and these three, presumably the most likely to be present in the mixture, are, digitalis, squills, and veratrum viride. I proceeded in the first place to ascertain whether the mixture contained a poisonous quantity of a heart-poison, poisoning by producing cessation of the heart's action in systole; and then to attempt to identify which of the three above-named poisons it might be. The bottle, a 4-oz. scent-bottle, contained 220 grains (equal to 182 minims) of a liquid having a specific gravity of 1209. I took half of this quantity, equal to a dose and a half of the mixture, reserving the other half. This first half (equal to 110 grains) I evaporated to dryness; this and all other operations being carried on at a temperature not exceeding 50° C. The extract I dissolved in water feebly acidulated by acetic acid, shook up with petroleum ether to remove fat &c., added ammonia shook up with chloroform, and evaporated the chloroform solution. I obtained a mere film, which I proceeded to test physiologically. In this series of physiological tests I had the great advantage of the co-operation and assistance of Dr. Whitelegge, the medical officer of health for the borough of Nottingham.

In the first place, on March 2nd, as a means of comparison, I took a frog (the Rana temporaria, not the R. esculenta, which is not nearly so well adapted for this purpose), exposed its heart, and injected into the lymph sac ·001 gramme of digitaline. This slowed the heart-beats in forty minutes, from 26 to 10 beats a minute. On the 7th I took three frogs: in the first frog I exposed the heart only; in the second I injected ·001 gramme of digitaline; in the third I injec ed the residue obtained as above described from 110 grains of the mixture. (The residues mentioned were dissolved in an extremely dilute solution of acetic acid before injecting.) In the first frog the heart-beats rose in thirty-eight minutes from 20 to 22; in the second, in thirty-two minutes the beats fell from 22 to 5; in the third, in which was injected the extract from the mixture, in twenty minutes the beats fell from 24 to a total cessation in systole. This showed that in the mixture there was a powerful cardiac poison. Had a mistake been made in dispensing? Had tincture of digitalis got in in place of one of the ingredients? To clear up this point, the coroner himself visited the druggist's shop, and requested him to make up the mixture according to the prescription quoted at the commencement of this paper. There can be no doubt that under these circumstances the prescription would be accurately made up. As a means of comparison, the prescription was also made up by an independent chemist, Mr. B.

[1] In this paper I have, to save space, omitted quotations from various authors on the subject dealt with; but a copy of the article, in its extended form, will be forwarded to the librarian of the Chemical Society.

Using the chemical process mentioned above, I obtained residues from 110 grains of A.'s second edition of the mixture, from 110 grains of the mixture made up by B., and also from 110 grains of tincture of veratum viride. On March 14th I exposed the heart in four frogs: the first frog I did not interfere with, using it as a control experiment; into the second I injected the residue from the mixture of B.'s dispensing; into the third I injected the residue from the 110 grains of tinct. verat. viridis; and into the fourth I injected the residue from 110 grains of A.'s second edition of the mixture. In the first frog, in 105 minutes the heart-beats rose from 22 to 24; in the second, after 105 minutes the heart-beats were the same at the end as at the beginning of the period—viz., 24; in the third, in twenty-five minutes the beats fell from 14 to 6; and in the fourth, in seventeen minutes they fell from 24 to a total cessation in systole. To the veratrum case I shall return shortly.

The fact of a powerful heart poison being thus shown to be present in the accurately made up mixture, it remained to ascertain to which of the four ingredients the toxic property was due. The oleum amygdalæ and the syrupus violæ appeared to me to be out of the question, there being no preparation of digitalis or veratrum sufficiently thick to be mistakenly mixed up with either of the other two; the choice lay between the ipecacuanha wine, into which some digitalis might have found its way, and the syrup of squills. I accordingly obtained some of the original syrup of squills and ipecacuanha wine from Mr. A., and some of the same preparations from Mr. B. It was noticed that both A.'s mixture and his syrup of squills were much more bitter than those from Mr. B. On March 16th I exposed the heart in four frogs, and injected into the lymph sac of the first frog 10 minims of ipecacuanha wine obtained from B. and in the second 10 minims of ipecacuanha wine from A., in the third 10 minims of syrup of squills from B., and in the fourth 10 minims of syrup of squills from A. In the first frog, in 150 minutes the beats rose from 30 to 32; in the second, in sixty-five minutes they fell from 30 to 26; in the third, in 150 minutes they fell from 24 to 10; and in the fourth, they fell from 28 to 16 in eighty minutes, and ceased in systole in 120 minutes.

This series of experiments pointed out that the syrup of squills was the toxic agent, and also that, though to a less extent, the same effect was produced on the frog's heart by B.'s syrup of squills as by A.'s, A.'s being evidently much the stronger of the two. In order to eliminate any error arising from differences in the physical condition of the injection, and to compare better with the first results obtained, I took the various quantities mentioned below and made chemical extracts containing the active principles, as in the first experiments. I took 30 minims of syrup of squills (as representing the quantity actually taken by each child, in its teaspoonful dose) from syrups furnished by Mr. C. (a second independent chemist), Mr. B., and Mr. A. Furthermore, I took 10 minims of ipecacuanha wine obtained from Mr. A., being the quantity contained in one teaspoonful of the mixture, and 10 minims of tincture of digitalis from the same source, as a control experiment. The residues I injected into the lymph sacs of five frogs on the 18th, with these results:—In the first frog, the residue from C.'s syrup of squills in forty minutes slowed the heart-beats from 38 to 36; in the second, the residue from B.'s syrup of squills in forty-seven minutes slowed the heart-beats from 36 to 10; in the third, the residue from A.'s syrup of squills in thirty-eight minutes slowed the heart-beats from 36 to cessation in systole; in the fourth, the residue from A's ipecacuanha wine in twenty-seven minutes slowed them from 39 to 34; in the fifth, the residue from A.'s tincture of digitalis in twenty minutes slowed the heart-beats from 39 to 18. These results will be more clearly seen in a tabular form in the next column.

It will be noticed that in Experiments 4 and 8, made with the first and second edition of A.'s mixture, the results are as nearly identical as may be expected in two different subjects; the second mixture, if anything, being more poisonous than the first. Comparing Exps. 12 and 15, in Exp. 12 a third of the dose given in Exp. 15 takes almost exactly three times the number of minutes to kill, $1\frac{1}{3}^{0} = 40$, instead of 38. These figures show that the results obtained, although occurring in different subjects, may be fairly compared.

It is evident from Experiments 1, 4, and 8, that 110 grains or 90 minims of the mixture, or 45 minims of syrup of squills, contain a dose of the toxic agent more powerful than ·015 grain of digitaline (= $\frac{1}{66}$ grain), as in Exp. 4, twenty minutes were sufficient to cause cessation of the heart's action, whilst $\frac{1}{75}$ grain of digitaline in forty minutes, or twice the time, slowed the heart's beats only from 26 to 10 per minute in Exp. 1. After considering the great difference in these two results, we may safely assume that the dose given—viz., a teaspoonful of the mixture, although only two-thirds of the 110 grains employed in Exps. 4 and 8, would contain such a dose of a toxic agent as is equal in potency to $\frac{1}{75}$ grain of digitaline—i.e., a full dose for a child. Perhaps the most remarkable comparison may be made between Exps. 15 and 17, by which it is seen that 30 minims of Mr. A.'s syrup of squills, or the quantity given in each teaspoonful dose of the mixture, killed a frog in thirty-eight minutes, whilst 10 minims of tincture of digitalis in twenty minutes only slowed the heart's action from 39 to 18; this twenty minutes also in Exps. 4 and 8 was the period in which a dose and a half of A.'s first and second editions produced death. So that a dose and a half certainly was much more powerful than 10 minims of tincture of digitalis. Again, comparing Exps. 15 and 1, it is seen that (if it is granted that the frogs were equally susceptible to poison) 30 minims of Mr. A.'s syrup of squills—i.e., the quantity contained in a teaspoonful dose—was more powerful than $\frac{1}{75}$ grain of digitaline. On the whole, we may consider that the dose of mixture given was equal in potency to $\frac{1}{70}$ grain of digitaline, or 10 minims of tincture of digitalis. The observations did not in every case cease at the periods denoted in the table, but are so given as to afford a fairly easy means of comparison.

Experiments.	Substance injected.	Original No. of beats.	No. of beats at end of time given.	No. of min.
1	Digitaline, grain ·015	26	10	40
2	Control	20	22	38
3	Digitaline, grain ·015	22	5	32
4	Residue, 110 grains, A.'s 1st mixture	24	cessation	20
5	Control	22	24	105
6	Residue, 110 grains, B.'s mixture	24	24	105
7	Residue, 110 grains, tinct. ver. vir.	14	6	25
8	Residue, 110 grains, A.'s 2nd mixture	24	cessation	17
9	10 minims, vin. ipec., B.'s ...	30	32	150
10	,, ,, A.'s ...	30	26	65
11	,, syr. scillæ, B.'s ...	24	10	150
12	,, ,, A.'s ...	28 and	16 cessation	80 120
13	Residue, 30 minims, syr. scill., C.'s...	38	36	40
14	Residue, 30 minims, syr. scill., B.'s...	36	10	47
15	Residue, 30 minims, syr. scill., A.'s	36	cessation	38
16	Residue, 10 minims, vin. ipec., A.'s...	39	34	27
17	Residue, 10 minims, tinct. digit., A.'s	39	18	20

In these experiments, the action on the frog's heart of digitaline, of the mixture, and of syrup of squills was identical. The first change noticed in the heart's action was an irregularity in the contraction of the muscular surface. Part of the muscle contracted and part did not, presenting the appearance of white, bloodless patches, where the muscle had driven blood out of the capillaries, intermixed with protrusions of a crimson colour, the protrusion being due to the relaxed condition of the muscle, and its crimson appearance to its containing blood in its capillaries. The systole gradually became lengthened in duration, and recurred less frequently, until at last the diastole never supervened—i.e., the heart ceased in cystole, becoming tetanised in fact, and assuming a bluish white, cyanotic hue, as if the contraction of the cardiac muscular fibre had driven all the blood out of the capillaries of the heart. This last and lasting contraction came on suddenly; the heart's beats slowed down to 8 or 6 per minute, and the heart suddenly contracted for the last time without any gradual slowing down; for long after this final contraction of the heart, two or three hours after in some cases, the frog moved, swam, jumped, responded to stimuli, and gave the usual reflexes.

With respect to Exp. 7, the veratrum viride case, in twenty-five minutes the heart beats fell from 14 to 6, when the diastole was noticed to be very imperfect. In seventy minutes the ventricle was contracted tonically and sacculated, showing the protrusions as in the case of digitalis and of squills. The ventricle was not nearly so firmly contracted, or of so cyanotic a hue, as in the heart poisoned by the mixture, or in that poisoned by digitalis. The auricles were

beating 8 per minute, and this continued for two hours after all voluntary and reflex movements had ceased. This experiment reveals a marked distinction between the action of veratrum and that of squills or digitalis. In veratrum poisoning, the voluntary and reflex movements are the first to cease, and the heart is the last to die; in digitalis or squill poisoning, as ascertained by other experiments of the series, the heart is the first to die, respiratory and other muscular movements continuing for three hours (recorded) after the heart's action had ceased.

In Exps. 13, 14, and 15, the action of the squills from the different chemists, C., B., and A., can be well compared, as the initial beats approximated so closely as 38, 36, and 36. Yet, whilst with C.'s syrup the beats only fell from 38 to 36 in forty minutes, in B.'s they fell from 31 to 10 in forty-seven minutes, and in A.'s from 36 to cessation in 38 minutes, showing the varying strength of the syrups as sold in the shops.

(To be concluded.)

REMARKS ON COLOUR-BLINDNESS.[1]

BY T. H. BICKERTON, M.R.C.S.,
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WHEN in the year 1794 the distinguished English chemist, Dalton, published a description of his sense of colour, the scientific world was surprised to find that there existed individuals whose perception of colour differed in an extraordinary way from that of their own. To say that an individual possessed the sense of sight was tantamount also to saying that he possessed the sense of colour, the latter being considered an integral part of the former, but Dalton's report clearly showed that the two senses, that of sight and that of colour, were separate and distinct; and that while an individual might have a perfect appreciation of form, he might also be quite unable to perceive any difference between two distinct and different colours. Previous to Dalton's report on his own case, two cases had been published in the London Philosophical Transactions,[2] the one in 1777, where an account is given of the colour vision of a shoemaker; the second in 1779, being the report of a gentleman on his own colour sense.[3] Both these cases, from the lucid accounts given, are evidently cases of colour-blindness, but no notice appears to have been taken of them; and it was not until Dalton related his own experience that the subject was brought into prominence. Dalton was twenty-six years of age before he had any suspicion that his colour vision was in any way different from that of others. He was interested in the study of botany, and must therefore have been thoroughly familiar with the names of colours; and the fact is worthy of note that in his lectures on Natural Philosophy he had actually lectured on the "doctrine of colours." Yet he had no idea of his defect until he observed one evening that by candle-light the flower of the geranium zonale, which was to him sky-blue by day, had changed to a distinct red. This, when his friends assured him that the colour of the flower was the same as by daylight, he could not understand; and it was this accident that caused him to investigate his own colour vision by means of the solar spectrum; and by his investigations he conclusively proved the existence of a condition in which opposite colours, such as red and green, appear as one and the same colour.

Having established this fact, observers on the Continent, and also in this country, were led into an inquiry into the frequency of the defect; but it was not until a comparatively very recent date that the practical importance of the subject was prominently brought forward. And it is the practical side of the question that I wish now to discuss, though a short notice of the classification of colour-blindness, and of the various theories which have been advanced to account for this condition, may not be without value. It may be divided into three classes. First, the blindness for colours may be total, a condition rare, in which the person is devoid of colour perception, colours simply being seen as shades of black and white. Second, the blindness may be partial, one or two colours only being indistinguishable, the remaining colours being seen comparatively normally. Under this head are classed those who are blind for red—red-blinds; those who are blind for green—green-blinds; and those who are blind for violet—violet-blinds. Third, the colour-blindness is slight, no one colour being absent, but the acuteness for all colours, or a part of the colours, being more or less diminished. As to the perception of colours, it may be of some little interest to briefly mention the theory advocated by Mr. W. E. Gladstone and Professor Hugo Magnus. Gladstone, and secondly Magnus, came to the conclusion from evidence derived from the Hebrew scriptures, the works of Homer, and various other ancient books, that as recently as the days of Homer there was no such sense as the sense of colour, and that where we see colour, man in Homer's time could only distinguish differences of luminous intensity, or that at the utmost he could only distinguish red and yellow. Starting from blindness to colour in the primitive man, they proceed to prove that progressive education of the colour sense took place, and that it took place in four stages. In the first stage the eye perceived the difference between red and black; later on the colour yellow was added; in the third epoch green and its varieties became visible; and the fourth stage of development brought us in an acquaintance with blue; and they argue that the colour-blindness of the present day is simply a survival of the primitive condition.

This theory of the post-historical acquisition of the sense of colour by the human race receives but little acceptance, the arguments against it being numerous and to most minds conclusive. One common-sense argument is, that a few hours spent in the British Museum among the mummy cases, and enamelled bricks dug up from the cities of Memphis, Thebes, and Nineveh, afford abundant proof that not only did the people who worked at the designs possess the colour sense, but that they possessed it in its highest degree, although they existed at least six or seven centuries before Homer made his appearance on this world's scene. A second theory as to the perception of colours, the Young-Helmholtz one, is that which prescribes to the eye the possession of three kinds of fibres, stimulation of the first producing the colour red, of the second green, and of the third blue, stimulation of all three fibres in varying proportions producing the intermediate shades and colours. By this theory the absence of the first, second, or third set of fibres produces blindness for red, or for green, or for blue, absence of all producing total colour-blindness. Hering, again, believes that there is no such thing as single blindness for red alone, or for green alone, or for blue alone; but that an individual blind to red is also blind to its complementary colour, green—red-green blindness; and that an individual colour-blind for violet is also blind for yellow—violet-yellow blindness; that instead of there being three kinds of blindness—red, green, and blue—there are only two—red-green and yellow-blue; and his belief has an increasing number of supporters.

My first acquaintance with the subject was in 1880, when serving on the London Committee for Investigating the Prevalence of Colour-blindness, and being struck by the large number of people who, unknown to themselves, were colour-blind, and the subject having much interest to me, I have since worked at it. In an investigation of this kind it is necessary, in order to obtain reliable statistics, to examine a large number of people, and the material has been obtained by examining the inmates of schools and other such-like institutions, and I have to offer my best thanks to the governing bodies for the ready aid that has in every case been accorded me. During the last five years the number examined personally has been 5087. Of these, 3087 were males, 1841 females, and 64 were male and 95 female lunatics. The method of examination has been that recommended by Professor Holmgren of Upsala. It consists in each individual picking out from a large number of differently coloured wools all those wools which have in them any tint of the particular test colour placed before him. The test colours used have been—(1) A very pale pure green; (2) a rose colour (a mixture of red and blue in the proportion of 2 to 1); (3) a brilliant scarlet; (4) an olive-green; and (5) an olive-brown. Now, the large majority of people will, when given the first test, pick out to the very last every skein which has in it any tint of green, however delicate, and they may be passed as perfect; but a certain number will choose some colour, such as grey, or yellow, or red to match with the green, or they will omit to pick out some of the greens. In either case they are referred to the second test, and the majority failing

[1] Read at the Liverpool Medical Institution, March 18th, 1886.
[2] Vol. lxvii., pp. 260-265. [3] Vol. lxviii., p. 611.

at No. 1 will fail also at this, blue, purple, or blue-green being mixed with the rose colour. Test 3 is now proceeded with, and the majority of those failing at No. 2 will mix with the brilliant scarlet, light- or dark-green and light- or dark-brown. Should any doubt still exist as to the case, Tests 4 and 5 may be given. It will be noticed that in Tests 2 and 3 a certain order appears to be maintained, those mixing blue and purple in Test 2, choosing dark-green and dark-brown in Test 3; while those who match blue-green with Test 2, choose light-green and light-brown with Test 3. This gave rise to the separation of colour-blindness into the two divisions, the one being called red-blindness, the other green-blindness.

For my own part, I am assured that the division is misleading, and for practical purposes it is not necessary. Examining the numbers critically, of the 3087 males tested, 179 failed at Test 1, either by omitting greens or by putting in some other colour. Of these 179, 74 passed successfully the remaining tests, and may be considered to have but a very slight chromatic defect, which may be disregarded. It was a matter of surprise to me that so many failed at Test 1 who passed the subsequent tests correctly; and I can scarcely think the errors due to ignorance of what was required of them; for in these cases each individual was shown the correct colours to pick out, and each case was given at least three trials. At the same time I am willing to admit that ignorance in a few of the cases may have been the cause, and that in these few cases further practice in colours might enable them to do the test correctly. Rejecting, therefore, the 74, we have 105 cases of colour-blindness—a percentage of 3·40. Going more into detail: of the 105 cases, 64 failed in Tests 1, 2, 3, and 4; 22 in Tests 1, 2, and 4; 11 in Tests 1 and 4; and 8 failed in Tests 1 and 2. Of the 1841 females examined, 3 only were to a greater or less extent affected—·162 per cent. One was a case of total colour-blindness—a very rare condition in the female sex; one was a red-blind, and the third was very slightly affected. Leaving the latter case out, we have two pronounced cases, or ·108 per cent. The percentage of 3·40 in males, as against ·108 in females, shows at a glance the striking difference in the two sexes to the liability of colour-blindness. In addition to these numbers, I have examined 64 male lunatics, finding one complete and one incomplete case, and 95 female lunatics, all of whom were correct. A certain number of policemen also have been examined and colour-blinds found amongst them, but all not having submitted to the test, it would be useless to draw conclusions from a part. The social status of those examined has varied from the lowest to the highest, and the age ranges from five years upwards, the large majority being under twenty-one.

Besides those included under the head of very slightly colour-blind, there were others whose colour perception was feeble. Amongst the lower social grades as represented by the children in orphanages and reformatories, a very considerable number made mistakes in the examinations, and these errors were made not only by those of dullish intellects, but also by those who, according to their mistresses, were sharp girls. Cases such as these have been retested after some months' tuition in colours, and in most cases where ignorance was suspected the second trial has proved the correctness of that conclusion; but there were others, who although they did the test, did it with the utmost difficulty. It is therefore very necessary, as Dr. Joy Jeffries of Boston points out, in his admirable work on colour-blindness, not to confound ignorance of colours with colour-blindness; and this may easily happen, he remarks, "if sufficient care is not taken by the examiner, for carelessness and stupidity simulate colour-blindness closely, and unless every precaution is taken, cases may be marked as colour-blind, or as at least partially so, which are not really deficient in the colour sense." Of the 105 cases of colour-blindness, not one so affected was aware of the defect, and I may remark in passing, that a number of them do not believe it to this day. It may seem curious that people who cannot distinguish as different colours red, green, and brown, and in some few cases blue and yellow also, do not themselves discover their peculiarity in their vision for colours; yet strange as it may be, so it is, and you will find it the exception for a colour-blind to realise in the first instance the defect himself.

In the majority of occupations it matters little whether a person is colour-blind, or not; but, on the other hand, there are some occupations where a perfect colour perception is essential, and I refer now to the two classes sailors and those employed on the railways. I take it that all will agree that individuals employed in either of these positions of life should possess in its highest degree the colour sense, and that none but these should be admitted into these services. We will now see what is the amount of care taken so far as sailors are concerned. Of the 3087 males examined, 788 were either sailors or were being educated as sailors in training ships, or were inmates of the Liverpool Seamen's Orphanage. Of these 788 there were no less a number than twenty-eight colour-blind, giving a percentage of 3·553, a larger percentage than is given by the whole. On board the training ship *Conway*, out of 154 boys two were colour-blind. One, aged fourteen, had been on board two years; the other, aged thirteen and a half, had been there eighteen months. Both were fond of the sea, both were unaware of their defect, and both (on their friends being informed of the matter) were removed from the ship. On the training ship *Akbar* there were four colour-blinds in 148 boys. On the training ship *Indefatigable*, out of 238 boys twelve were colour-blind to a greater or less extent, the ages of the lads ranging from twelve to sixteen. Many of these boys, but for the accidental examination, would have been drafted into the mercantile marine, and in future life many, if not all, would have had on occasion to act promptly. Coming nearer home, it will scarcely be credited that of forty-eight of the Birkenhead ferrymen two were colour-blind, yet such is the case. One of them, J. A——, aged forty-three, has been a seaman all his life. For fourteen years he was master of a flat, and for the last seven years he has been in the employ of the Woodside Ferry Company, and in the position of mate has on many occasions taken charge of the ferry boat. Both of these men on being tested with coloured lights as often as not called the red lights green and the green lights red. The practical outcome of this therefore is that any man, whether he be colour-blind or not, may be a sailor, and as such is permitted to risk the loss of property which would carry with it in many cases the loss of life also. It might be answered, Yes, but an ordinary sailor does not have command of a vessel; that is entrusted only to the officers—the captain and the mates,—and they cannot obtain their certificates as such until they have passed the Board of Trade examination in colours. Granted; and we will now inquire into the Board of Trade examination.

In 1877 the Board of Trade came to the following conclusion, "That all candidates for examination for a master's or mate's certificate shall pass a test examination as to their ability to distinguish the following colours which enter largely into the combinations of signals by day or night used at sea—namely, black, white, red, green, yellow, and blue," and they state that they "have been led to this decision because of the serious consequences which might arise from an officer of any vessel being unable to distinguish the colours of the lights and flags which are carried by vessels." Since 1877, therefore, on a sailor wishing to become an officer, he is tested by a Board of Trade official as to his colour vision, the Board of Trade examiner usually being a retired officer. I have the official return of the Board of Trade of all those who, on applying for certificates, were found defective between May, 1879, and May, 1884, and it will be found that eighty-five were rejected on account of colour-blindness. Of this number, thirty-nine again applied, and twenty-six of them passed on the second examination, thirteen being rejected, and of these thirteen, five on again presenting themselves were allowed to pass on a subsequent occasion. Therefore, of eighty-five colour-blinds as recognised by the Board of Trade, thirty-one eventually passed and were granted mate's or captain's certificates. Now, it is admitted by all authorities on the subject that congenital colour-blindness is incurable, or that once colour-blind always colour-blind, and we are driven by the Board of Trade official statements to one of two conclusions, either the twenty-six men rejected for colour-blindness at the first, and the five rejected also at the second, examination, but who subsequently passed, were not colour-blind, or that we have officers in the mercantile marine who are colour-blind. The following case will aid us to decide the point.

Mr. A. B——, aged twenty-nine, called recently to ask if he was colour-blind. He went to sea when fourteen years old in the White Star Line, and when twenty-one years old obtained his second mate's certificate. Shortly after he went in for his first mate's certificate, but was rejected for colour-blindness, and on three subsequent trials he has also failed. But he has his second mate's certificate, and as second mate he has regularly sailed in the employ of four large teamship companies sailing from this port, and in his

turn of duty has entire command of his ship. This gentleman is a complete colour-blind, and is still sailing as second mate. In justice to the steam-ship companies I must remark that they are unaware of his defect. I could mention other illustrative cases, but I have I think brought forward sufficient proof, not only of a danger that does exist, but also that adequate care is not taken, in the case of sailors, to guard against that danger. And the danger is no myth, though many are inclined to think that it is much exaggerated. The number of sailors in Liverpool has been calculated for me by Dr. Hope, the assistant medical officer of health, to be 27,136. Taking 3·40 per cent.—the percentage found in the 3087 cases—to be colour-blind, we have a total of 922·99 men in that line of life who have not an accurate colour perception.

In a very able article[4] Dr. Brailey points out that the regulation side lights on a vessel, the red and the green, should be recognised in clear weather at a distance of two miles, and that in the case of two vessels meeting at night, until therefore they are within two miles of each other, they can get no indication of their relative positions. That if the night is not clear or the lights badly trimmed, the distance at which the lights can be seen is greatly diminished. Supposing two steamers going at a rate of twelve miles an hour (the Holyhead boats travel at the rate of twenty), he points out that they would meet in five minutes, a short enough time for a course to be altered. If therefore there is any hesitation on the part of those in command, a calamity such as has recently occurred may take place. The subject is one that may be worked at by all, and one that would be found of interest by all, and as the medical profession have generally been the means of pointing out existing dangers, so in this case I expect it is only through them that this subject will attain the attention due to it.

HÆMATURIA FOLLOWED BY RETENTION OF URINE.

BY HENRY GRAMSHAW, L.R.C.P.I., M.R.C.S.

E. R——, aged sixty-nine, of Lowestoft, a stout, fairly healthy-looking tradesman, called at my surgery to consult me on Sept. 5th, 1880. He complained of some difficulty in micturition at night, and remarked that the fluid he voided was dark in character, and somewhat diminished in quantity. I gave him a purgative, and prescribed a gallic acid mixture with henbane and infusion of buchu. He called again on the 7th, bringing with him a bottle of coffee-ground-looking fluid, evidently urine, mixed with blood, and said he felt a little better, and rested longer at night, since taking the medicine. On the 9th he called to say he was much better, and that the urine was almost clear again. On Friday, the 10th, he presented himself with a less favourable report, and brought more urine, charged with blood, as before. He has been continuing his medicine, with the addition of some acetate of lead and opium pills, but without experiencing much benefit from it. He had rather imprudently taken a railway journey to Yarmouth on the Thursday, and sat up late; further on in the day he sent for me to visit him at his house, but being absent at the time, my assistant went, and, finding that the patient was unable to micturate, he passed a No. 8 gum-elastic catheter, and drew off about four ounces of bloody urine, which apparently afforded him much relief. This was at 5 o'clock. An hour later I saw him myself, and found him walking about the room in great distress. I passed a catheter, and drew off about a teacupful of bloody fluid. I tied the catheter into the bladder, and left him. Between 12 and 1 o'clock I was sent for again to see the patient, and my friend Mr. Clubbe kindly met me in consultation. We decided to give him a mixture containing opium and ergot, and to leave the catheter *in situ*; there was a small quantity of fluid oozing from it. On Saturday, the 11th, I found the patient had passed a tolerable night, with occasional sharp paroxysms of pain. The cloths and bedclothes were saturated with blood and urine, which had flowed down the catheter. I had them removed, and placed the end of the catheter into a glass bottle to ascertain the amount actually passing. At my mid-day visit I found that about eight ounces had escaped. I emptied the bottle, and replaced the catheter. About 9 o'clock the same evening Mr. Clubbe met me again. No urine had passed since my last visit, a space of eight hours, and we decided to withdraw the instrument, expecting it had got plugged, and to substitute a fresh one. We passed both gum elastic and silver prostatic catheters consecutively into the bladder, but no fluid came away, and we felt a little doubtful if by any chance a false passage had been made, though it did not appear so, as no difficulty was experienced with the catheter.

Not to be tedious, I will briefly say that during the next day (Sunday) Mr. Clubbe and I made several attempts to empty the bladder, but failed to do so, and we were a little surprised to find, as time passed on, that our patient's symptoms were not more urgent than they appeared to be, as the retention was complete. The pain, such as it was, he felt principally at the end of the penis, there being comparatively little about the vesical region. The grave aspect of affairs led us to deliberate on the next best mode of procedure; and we asked ourselves the question if it would be wise to proceed to puncture the bladder per rectum or otherwise. Having laid the facts before the relatives, I counselled them to allow me to telegraph for Mr. Cadge of Norwich to assist us with his opinion and advice in the emergency. Consent being given, that gentleman came over and saw the patient, with Mr. Clubbe and myself, at half-past ten on Monday the 13th. Just before his arrival a little additional light was thrown on the case in consequence of the patient having passed in a clot of blood about twelve small calculi. The history of the case up to the present time having been laid before Mr. Cadge, he at once gave it as his opinion that the patient's bladder was fully distended and blocked up with clotted blood, and that in all probability when catheterism was performed, the catheter went fairly into the bladder, piercing the blood-clot, which was too solid to flow down it. He said he was strongly averse to puncturing the bladder by the rectum in the case of an elderly, fat man, with prostatic enlargement, as it would probably be a procedure attended with no benefit, and, if need be, he should prefer either to puncture the bladder above the pubes or to aspirate it—which latter might be considered a more new-fashioned plan of procedure; but before electing to undertake either operation, he would try what could be done *per vias naturales*—i.e., by the urethra itself.

Accordingly Mr. Cadge passed a No. 8 (with an unusually large eye), and afterwards a No. 10, into the bladder without much difficulty. A very little currant-jelly-like fluid escaped. After a long and most painstaking process of breaking up the clot in the catheter with a stilette, and gradually and judiciously forcing the clot down the catheter by firm and yet gentle pressure on the bladder, there was discharged a chamber utensil half full of clotted blood, mixed with ammoniacal-smelling urine, giving the patient substantial relief. The proceeding itself involved fully two hours of patient and skilled manipulation on the part of the operator, at the end of which time the patient fell back and slept comfortably for several hours. At 9 P.M. a similar process had to be repeated by Mr. Clubbe and myself.

Sept. 14th.—10.30 A.M.: Patient has had a very restless night; complains of more intolerance of the loaded bladder than he did previously. When the catheter is passed clot and thick treacly liquid comes at first, but little else; aided, however, by Clover's catheter with elastic suction-bottle, after first throwing into the bladder a little warm water, I got the patient to stand up, when a stream of bloody urine flowed down the catheter, amounting to twenty ounces or more. 8 P.M.: Used Clover's catheter again this evening. Patient passed more urine than he has yet done, and of a better colour and greater fluidity. There has also been free action of the bowels. The patient can take only milk. Gave him an opiate at night.—15th: Patient better; appetite returning. A considerable quantity of bloody urine withdrawn three times during the day by catheter. Ordered camphor and hyoscyamus, five grains of each, at bedtime, and to take the following three times a day: Solution of dilute sesquichloride of iron, twelve minims; water to one ounce. From this date the patient got slowly better, requiring catheterism three times a day for nearly a month, after which time he quite regained his usual health.

Remarks.—I have been tempted to give the details of this case rather fully, because it is the sort of case one might meet with any day in practice, and would always give the

[4] Brit. Med. Journ., Nov. 24th, 1883.

surgeon in attendance considerable anxiety. It also exemplifies the advantages of patience and perseverance. I gathered from Mr. Cadge's remarks that in all cases where retention of urine from the presence of a large quantity of clotted blood in the bladder took place he would be disposed to temporise, believing sooner or later that the clot would liquefy and break down, and be removable by means of a good-sized large-eyed catheter.

Walton-on-the-Naze.

THE SIGNIFICANCE AND TREATMENT OF CERTAIN FORMS OF ALBUMINURIA.

By A. G. AULD, M.D.

Acute Albuminuria.—Acute albuminuria or acute nephritis is a remarkable disease. Excepting its occurrence from the scarlatinal or other specific poison, it is in the great majority of cases ascribed to "cold and wet." Yet of a hundred cases of exposure to these agencies probably not more than one will be visited by this disease. Again, in scarlatina no adequate reasons can be given for its development in any particular case. It must therefore be confessed that its intrinsic causes are unknown; and not only so, but likewise the *modus operandi* of these causes *ab initio*.

Looking, then, at the known facts, increase of arterial tension is the first observable symptom. Occasionally there is hæmoglobinuria. The invasion may take place insidiously, unattended with any constitutional disturbances perceptible to the subject, who may be suffering from debility; or sudden and fierce, giving rise to grave constitutional states. In the asthenic form, dropsy is usually the first symptom noticed by the patient if his attention be not previously drawn to the state of his urine. But, however established, uræmia is equally liable to supervene, and may even be the first symptom to give the alarm.

These modes of onset of this disease are not without parallel. For instance, it is known that acute pneumonia, though in the majority of instances having a sudden onset, may yet be creeping into a lung, and become pretty extensively established before the individual be sufficiently ill to think of leaving off work. There are also other striking points of resemblance in the natural histories of these diseases.

I suppose there is no disease of which it may be more truly said than of nephritis, that it spurns our artificial medication. Many persons pass safely through it without ever seeking medical aid; and when treated, if happily it should disappear, that result is of course by many set down in orthodox fashion to the particular remedy or remedies employed. It is not so very long since many highly respectable practitioners prescribed a course of mercury in this disease, and, *mirabile dictu!* very often with the result of a cure. It is a good thing that Nature still works as heretofore.

The eminent Sydenham, treating of the dropsy, remarks that the curative indications are to evacuate the water and to strengthen the blood.[1] The first of these he fulfilled by speedy and smart purging, provided the patient was strong if of a weak habit, he found purgatives harmful, and resorted to diuretics and strengthening medicines. This mode of treatment was that generally adopted up to the time of Christison. Since then diuretics have fallen into comparative disuse, while the purgatives have been retained, which, together with hot baths, starvation diet, the imbibition of large quantities of water or other harmless fluid, and occasionally bleeding, form the cardinal measures now in use.

Unfortunately it has become the practice of many to adopt most or all of these heroic measures in every case of acute nephritis. It is said that diaphoretics and purgatives do the work of the kidney. That to some extent they do so cannot be gainsaid. They do produce a transient and superficial relief, but it is equally certain that their indiscriminate use is often productive of the greatest harm, especially if indulged in for any length of time. There are doubtless contingencies wherein one or other of these heroic measures are called for; where, namely, pyrexia runs high, where vascular tension overleaps the bounds of safety, where the march of uræmic symptoms is unchecked by the natural means, or where the advancing tide of œdema threatens to invade the vital organs. But each case is to be dealt with on its own merits, and the weakly will often quickly recover on tonic treatment, while irretrievable damage might be inflicted by any such exhausting processes as a course of purgatives and hot baths.

Whatever benefits are supposed to accrue from the energetic means so universally adopted, it is certain that physiologically they are antagonistic. The hot bath causes a great increase of the general blood-pressure and of the temperature, a bounding heart, with distended vessels and injected capillaries. Purgatives and antiphlogistics cause lowering of the blood-pressure and of the temperature and a depressed heart; while fluids imbibed in quantity heighten pressure and dilute the blood. I think, to pursue such a course of treatment can scarcely be justified on scientific grounds. Where is the *rationale* of placing cupping-glasses over the loins and then filling the kidneys with blood, of abstracting the water of the blood and then pouring water into it?

There is one of these agents, however, which must be discussed more in detail, and that is the hot bath. Senator has proved that when the temperature of an animal is raised by from 1·5° to 3° C. albuminuria results; and if the temperature be very rapidly raised to an extreme degree, blood and often hyaline and granular casts are present in the urine.[2] Albuminuria also occurs in the human subject from a very high bodily temperature. The kidneys being greatly distended with blood, rupture of capillaries is liable to take place. Yet hot-water baths, sufficient to produce these effects in some measure, are employed for the cure of inflammation of the kidneys. The warm bath, with its many beneficial effects, is set aside in favour of baths which cause an enormous rapidity of the pulse-rate and respiration, and sustain a great height of temperature; indeed, lately a St. Petersburg physician for these very reasons strongly advocates the use of hot water in preference to hot air or wet packing.[3] It is also an interesting fact that cases of scarlatinal albuminuria are most frequent during hot, relaxing weather, as the statistics of the London Fever Hospital show, and very frequently apparently healthy persons pass a little albumen in these circumstances. This being so, another method must be sought for the production of diaphoresis, and nothing is more admirably fitted for this purpose than the hypodermic injection of pilocarpine. Given in doses of from a quarter to a third of a grain, profuse diaphoresis is induced, without any vascular stimulation, but, on the other hand, with fall of tension. If, however, smaller doses are given, there is an initial stage of stimulation, which quickly passes off. Not only is this the best remedy for dropsy, but also for threatened uræmia and for uræmic convulsions, should purging prove ineffectual.

So far, then, as I have observed, I should prefer to adopt in the first instance a somewhat expectant plan of treatment in this affection. In the early stages, should no urgent symptom arise, small doses of aconite will suffice, with due attention to diet, which should be fairly nourishing and include abundance of milk. Should the disease threaten to become subacute, abundant nourishment, with cod-liver oil and iron, should be administered. I could relate several instances, some of them amusing, of patients who were kept in bed half starved, and steamed for weeks, with but little amelioration of their symptoms, who got up and returned to their usual diet and modes of living, and speedily recovered.

Acute albuminuria may terminate suddenly or gradually. Complete recovery may ensue after the dropsy has been six months or even a year established; and it may occur many times in the course of a life without causing any chronic affection of the kidneys. If, however, the disease should attack one who has got diseased blood-vessels, however slight, he can never perfectly recover.

Albuminuria of Debility.—If a medical man examines the urine of all who may consult him without reference to any disease of the kidney, he will frequently find albumen. In the majority of cases he will also be able to discover its cause. I wish to notice here the form of albuminuria associated with debility without any renal lesion. A great many cases of transient albuminuria and so-called cyclic albuminuria, which are variously ascribed to impure blood, slight congestions from cold, dyspepsia, nervousness, and other causes, also called albuminuria of adolescents, may shortly be said to be due to debility. In a strong person, a nervous

[1] Works, edited by Swan, pp. 593-595.

[2] Senator on Albuminuria (New Sydenham Society), pp. 49-50.

[3] THE LANCET, 1885, vol. ii., p. 1016.

shock, or gymnastic exercise, or a night's dissipation will not likely be followed by albuminuria. But if the tissues be vitiated, various states of the nerves and vessels arise which readily explain its occurrence. It will thus be found sometimes due to the mere nervousness many persons experience on coming into the consulting-room. By systematically examining the urine of as many patients as possible, I have been fortunate enough to discover a few presenting this form of albuminuria, but cannot say that I have observed anything which justifies the application of the term cyclic to them, unless it be the absence, as a rule, of any albumen in the evening and morning. The albuminuria appears with the exciting cause, and varies with the general health. It is doubtless due either to spasm or paralytic dilatation of the renal vessels. "Whenever," says Hutchinson, "the circulation is specially liable to reflex derangements, and congestions or their opposite occur with unusual facility, we are safe in declaring that the tone is low. It is part of the nervous system to duly regulate the supply of blood to various parts, to prevent local arterial spasm, and under the varying conditions of daily life to maintain the normal balance of the circulation. When this power is deficient, the various causes of disease act with increased effect."[4]

Regarding the treatment of these cases I have seen the albumen entirely disappear after a course of cod-liver oil. Abundant nourishment should be taken and a good amount of exercise. There appears to be nothing so very remarkable about them as some would suppose, and it is not improbable that a little albumen is now and then passed by everyone in sufficient quantity to be easily recognised by ordinary tests.

Wick, N.B.

MEASLES DURING VACCINATION.

BY A. K. CHALMERS, M.B.,

LATE PHYSICIAN-SUPERINTENDENT, JOINT BURGHS FEVER HOSPITAL, MARYHILL, GLASGOW.

IT seldom happens that the date of exposure to the contagion of measles can be fixed so accurately as in the following series of cases.

On April 20th, B——, a child, two months old, was vaccinated, and on that day week had two well-developed vesicles. It seemed in perfect health, and three children were vaccinated from it by the direct method. On the following day, after a few hours' fretting, a measles rash appeared and followed a normal course. There were no distinctive premonitory symptoms, and the course of the vaccine vesicles was not affected by the measles. Of the three children vaccinated from this infant, one, F., five months old, developed a typical measles eruption on the afternoon of the eighth day of vaccination (May 4th). No stage of premonitory symptoms, and course of vaccine vesicles unaltered. Another of the three, H., five months old, had some lacrymation on May 4th (one week after vaccination), was restless and sneezing during the following day, and on May 6th presented a blotchy and ill-developed rash of measles on the trunk and limbs. The vaccine areola here was of considerable size and hardness. The third child (S.) displayed a papular eruption (vaccine lichen) in the second week, but no measles, and may now (three weeks after exposure) be assumed to have escaped the infection. In connexion with the child H., another case arose in an infant of a few days. This patient, the child of a neighbour, was born on April 26th. On May 6th it vomited, and on the 7th was completely covered with a typical rash of measles, which followed the course of a normal one in older children. From May 2nd a hoarse "measly" cough was present. When the child first mentioned developed measles, it became of importance to watch the probable inception of the disease in the others. They were children of families living widely apart, and only brought in contact for vaccination. The vaccinifer, as afterward appeared, was then in the pre-eruptive stage of measles, but no catarrhal symptoms had developed. What part, if any, would the lymph play? Could it act as carrier of poison from a source which had given no indication of being contaminated? If the children vaccinated from this one became infected, how had the contagion reached them.

The fourth case related, in the child of eleven days, suggests, if it does not determine, the manner of infection. The rash here followed, within twenty-four hours, its appearance on the neighbour's child (H.); and unless the incubation period of measles can be reduced to a vanishing-point, these two cases have only an accidental relationship. Indeed, this youngest child seems to come within the primary circle of infection, and to have derived its infection indirectly from the source which affected the children F. and H. How far, however, the first case may be held as causing the others is uncertain. We recognise the pre-eruptive stage of measles as probably the most infectious, but catarrhal symptoms have been held necessary to fix the beginning of the infective period. This child had no such stage; the eruption was amongst the earliest symptoms. The other children of its family went through an epidemic of measles about six months before. In the interval they removed from the house they then occupied, but carried the contagion with them. A passing depression of the child's system, consequent on vaccination, supplies the necessary fuel, and the poison awakens to fresh activity. But unless we regard the clothing of this child or its mother as containing the contagion which infected two of the children vaccinated from it, and by transmission, in the clothing of the child H. or its mother, reached the newly born infant, we must accept an infective period, preceding the eruption of measles, which is non-catarrhal, and has no symptoms by which it can be recognised. The child which escaped infection is probably an example of the possibility of pure cultivation of vaccine virus in an infected medium.

Mossend, Lanarkshire.

[4] Pedigree of Disease, p. 131.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

FISH AS AN INVALID DIET.

BY J. STUART NAIRNE, F.F.P.S.G.,

SURGEON TO THE GLASGOW SAMARITAN HOSPITAL FOR WOMEN.

IN the summer of the year 1879 I attended a young gentleman in Crosshill suffering from typhoid fever. The course of the disease was very sharp, but he came favourably through it; and when I left for my holidays, four weeks after the commencement of the disease, he was regarded both by myself and another medical man as convalescing. Less care was then exercised with regard to regulating his diet, and the medical attendant called only occasionally to see him. He partook of fresh white fish, and of only a small piece for breakfast. During the same evening my friend was called in hurriedly to see him. There had been a sudden rise in temperature, a relapse of the fever, with dark-coloured stools, and he died in a few days.

Last summer the sister of a medical friend in the country took ill of typhoid fever of a lingering type, with a not very exalted temperature. She seemed to be convalescing favourably, although slowly, when she was given a little fresh fish, boiled. The fever assumed an acute form, she suffered from pains in the bowels, followed by dark-coloured stools, and she died in about ten days.

A little boy in Pollokshields had a mild attack of gastric fever. The temperature was never very high, languor, debility, and wasting being the prominent symptoms. At the end of three weeks he seemed to be progressing favourably, and I had diminished my attendance on him. He had a small piece of fish given him, which was immediately followed by a relapse of the fever, an aggravation of all the symptoms, and pain in the abdomen. It was fully three months before he recovered, although previously to his taking the fish I could have pronounced him to be well.

A young lady was suffering from hæmatemesis, the result probably of a gastric ulcer. She was reduced to an excessive degree of pallor. Her diet was regulated, and she took Morson's pepsine. She seemed to make a good recovery, and I ceased my attendance for several days. In the interval she had broken through the regulations for her diet, and partook of a little fresh fish, as being, she said, a very light diet. She afterwards became suddenly ill, and vomited a large quantity of blood; she also passed dark clotted blood at stool.

An old gentleman in Mount Florida suffered from what was presumably malignant disease of the pylorus. He both vomited and passed dark blood at stool. Palliative measures were adopted, and his diet was regulated. Fish, which had not been particularly forbidden, was partaken of one day, and this was followed by excessive vomiting of blood and by death.

A lady in Glasgow is at present suffering from what has been variously diagnosed as disease of the stomach, pylorus, omentum, and liver. At any rate she is jaundiced, wasted, and subject to severe pains and sickness shortly after taking food. She feels frequently very sick, vomits frothy fluid and dark bilious matter, and occasionally passes decomposing, loose, bloody, dark matter of a most offensive smell. On every occasion on which she has partaken of fish these symptoms have been aggravated if present, and have been brought on if absent.

Cases such as these have been continually cropping up and causing great anxiety. It seemed to me that, under any circumstances of debility, fish, instead of being a genial diet, is a very dangerous one, and I had got into the routine practice of almost always forbidding it; but I have been induced to put these cases on record because I believe now that it is the preparation, the cooking, of the fish that is at fault, and not the fish itself. Recently I have been able to see all the recognised benefits of this diet from using it steamed, and not boiled. And for this hint I am indebted to the intelligence of a patient. I had, as usual, forbidden fish to be eaten, explaining my reasons. I was told that fish steamed, as was done in that house, was as tender as could be, and never disagreed with them. The fish so prepared was partaken of both with relish and benefit. I got a steamer for myself, have recommended this plan of cookery to my patients, and have had satisfactory results. Dieting is the half, and sometimes the best half, of medical treatment; and, perhaps a little to my chagrin, I find that this system of preparing fish has been specially recommended by various schools of cookery. Perhaps, however, many medical men, like myself, may be unaware of the fact, simple as it is, that boiled fish, fried fish, and almost any other kind of cooked fish, are all inferior in digestibility to steamed fish. The kettle[1] I have used is a simple and efficient steamer. The fish is never touched from the moment it is put on the drainer in the kettle till it is cooked, and the drainer is so constructed that it can be removed from the kettle with the fish and placed upon the dish for the table.

I have ventured to put these few cases on record both on account of the dissatisfaction I have had formerly and the satisfaction I have now in ordering a cheap, nourishing diet.

Glasgow.

NOTE ON A RARE DISLOCATION OF THE ELBOW-JOINT.

By C. GEORGE BATTISCOMBE, M.B., C.M. Aber.

ON April 9th I was called to see a gentleman who had met with an accident while hunting. I found him lying in a field, and was told that his horse, after jumping a fence with a long drop, had fallen over backwards upon his right arm and leg. He complained of great pain in the elbow-joint on the slightest movement. It was very much altered in shape, and evidently severely injured. I secured the arm in a sling, and had him removed to the Cottage Hospital (Chislehurst, Sidcup, and Cray Valley), which was close by.

On his arrival at the hospital I examined the arm, and found it in the following condition. The forearm was fixed at rather more than a right angle to the arm; all power of natural movement of the elbow-joint was lost; and any attempt at forcible movement caused great pain. The hand was partially pronated, but on turning it pronation and supination could be readily performed. The elbow-joint appeared too wide from within outwards and from before backwards; it presented two prominences below, an inner and outer, and one above the latter, which projected backwards and was continuous with the forearm. The inner angle of the joint was too high, so that the arm appeared to be shortened. There being no amount of swelling, the following points could be clearly made out. The ulna and olecranon were missing from their natural position in relation to the humerus, the two condyles of which could be distinctly felt with the notch between them. The ulna and olecranon were resting fully half an inch above the external condyle of the humerus, the elbow projecting about an inch beyond the latter. The radius could be felt above with its head resting against the outer border of the humerus. It was not separated from the ulna, and rotated readily on pronating and supinating the hand.

I put the patient under chloroform, and carefully examined for any fracture. I could find none whatever, and concluded that it was a case of complete dislocation outwards of both bones of the forearm. I then proceeded to reduce the dislocation. Grasping the forearm with one hand, and the elbow with the fingers of the other, I pulled it steadily downwards, endeavouring to get the olecranon over the external condyle. It took some minutes to do this, and required a good deal of force. Then, holding the olecranon below the condyle with the left hand, I seized the forearm lower down and used it as a lever, and while forcibly extending the forearm I rotated it outwards. On continuing the extension, the olecranon suddenly slipped into its natural position. The joint immediately answered to all its proper movements, but when left alone tended slightly to return. I fixed it at a right angle on a posterior angular splint.

When I called in the evening the patient was free from pain, and complained only of a feeling of numbness in the arm and hand of the injured side. The next morning, when I arrived at the hospital, he had gone home; but I ascertained that, beyond the numbness and a little swelling, he was very comfortable. A week afterwards he was doing well, could move the joint pretty freely, and was free from pain.

Complete lateral dislocation of both the bones of the forearm is, I believe, extremely rare. I have seen no description of it, though it is mentioned in several surgical works.

St. Mary Cray, Kent.

HYSTERIA OR TETANUS?

By JAMES LAFFAN, L.R.C.S.I.

THE following case presents some interesting features:—

On Easter Sunday last I was hurriedly called to attend a young girl, a servant, who had been accidentally shot. I found her lying on a bed bleeding profusely from a large ragged wound, which seemed to have carried away the greater part of her right cheek. She had received the contents of a gun—a large charge of small (No. 6) shot—discharged at a distance of not more than four feet. It being late in the evening, I satisfied myself that there was no fracture of importance, and merely arrested the hæmorrhage.

Next day I found that the charge of shot had struck between the molar teeth of the upper and lower jaws, which must have been in apposition at the moment. The teeth were uninjured. The pellets glancing off the teeth had distributed themselves in every direction. Some had gone almost vertically upwards, breaking off the inner end of the zygoma, and finally lodging themselves beneath the eyelid in the inner angle of the orbit. Others had been deflected downwards, others back as far as the parotid gland, others again forward to the angle of the mouth. A few had penetrated deeply through the canine fossa, and lodged themselves beneath the zygoma. All the muscles of this side of the face were more or less bruised and lacerated, and there was much sloughing.

After three days' incessent poulticing and syringing all the sloughs and foreign bodies came away, leaving a clean, healthy wound. I extracted in all 311 shot. On the fifth day the patient complained of a good deal of pain about the jaw, also of stiffness in that region (the latter was attributed to the bandages), and of a burning pain in the stomach. On the sixth day she was seized with violent tetanoid convulsions. I was sent for, and on my arrival found her in a state of perfect rigidity, moaning with pain. Opisthotonos was well marked. I gave chloroform, and after a little while the spasms ceased. I then ordered her full doses of bromide of potash and chloral hydrate. She was quiet until the next day, when she was again seized with similar symptoms. They again yielded to chloroform. She was attacked again twice during the night of that day, but much less violently. Her condition was one of stupor now, from the effect of the hypnotics. The following day

[1] Patented by Orme, Evans, and Co., of Wolverhampton.

she had a slight rigor, which recurred faintly during the night. I kept her under the influence of the bromide and chloral for four more days, gradually diminishing the dose, and she had no further bad symptoms. The wound has now completely cicatrised, and a parotid salivary fistula, which threatened to be troublesome, has ceased its discharge.

There is no previous history of hysteria, but the girl was fanciful and obstinate. I hesitate to believe that this was a case of pure tetanus, there being such an extensive area of peripheral nervous irritation and so much tissue destroyed—tissue which has such intimate relationship with important ganglia. I am inclined to believe that had neuritis been set up, followed by tetanus, a fatal result would have been inevitable. This girl, however, completely recovered under very ordinary treatment.

Larnaca.

WOUND OF THE ORBIT.

By WM. FRASER, M.B. Dub.

THE following note may interest your readers as showing what escapes some people have.

Harry H——, aged eleven years, was brought to me at 5.45 P.M. on May 24th last, the schoolmaster saying that the boy was running with others to school, and while climbing the gate he slipped, running a slate-pencil he had in his hand into his eye (this was about 3 P.M.). On raising the upper lid of the right eye, I could see the end of a slate-pencil protruding at the inner canthus, between the lower lid and sclerotic, the direction being downwards, inwards, and towards the nose. With a forceps I was just able to catch it, and it took a steady, hard pull to extract it, the point being tightly lodged in the bone. It measured 1½ in., 1½ in. being out of sight. The wound was dressed with benzoic acid on damp cotton-wool.

May 25th.—Not much swollen; no ecchymosis at all. The boy can see quite clearly. There is a little tenderness towards the bridge of the nose.

27th.—I cannot detect where the pencil entered. The patient feels quite well.

30th.—All swelling gone; no pain—in fact, he has quite recovered, and resumes school to-morrow. He has not complained of the eye since.

Ashburton.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

A CASE OF CYST OF THE BROAD LIGAMENT AND ONE OF HYDRO-SALPINX; ABDOMINAL SECTION AND RECOVERY IN BOTH.

(Under the care of Dr. GERVIS and Mr. SYDNEY JONES.)

THE following cases are not only interesting in themselves, but form important contributions to the department of surgery to which they belong. In both the symptoms and physical signs were somewhat alike, and it was only after removal and careful examination of the parts removed that the exact nature of the disease could be determined in the first case. In Case 1 the symptoms had existed for six, and in Case 2 for four years, and during that time the patients had been almost completely incapacitated from exertion of any kind. Since operation they have been free from pain and enabled to perform the ordinary duties of their position. A curious feature during the after-treatment of both patients was the difficulty experienced in keeping them quiet; they appeared unable to exercise any control over their actions. For the notes of the cases we are indebted to Mr. Leonard Wilde, dresser.

CASE 1. *Cyst of the Broad Ligament; Cystic Degeneration of both Ovaries; Removal of Ovaries and Appendages; Recovery.*—E. D——, aged thirty, married, a Welsh woman, was admitted under the care of Dr. Gervis on Jan. 5th, 1886. There was a strong history of phthisis in the family, two sisters and a brother having died of it. Her health had never been very good; she had always had a good deal of cough. Two or three years ago she spat up a little blood from time to time with the cough. She had not suffered from night sweats, and for the last year or so the cough had been better. The catamenia began at the age of fourteen, and have been regular, lasting about three or four days. She has been married six years, and has one child five years of age. The confinement was difficult, forceps being required. Ever since that time she has had to keep her bed more or less, being unable to sit up. The catamenia recommenced two months after her confinement, and every fortnight since she had lost a good deal, the period lasting from five to nine days. She complained of burning pain in the back, loins, and thighs, and severe itching of the vulva. The pain was worse during the periods. The bowels were usually constipated, and the patient suffered severe pain during defecation. Occasionally she had difficulty in passing urine, but now and then micturition had been too frequent, and accompanied with pain; sometimes there had been incontinence. The sound passed easily into the uterus, which appeared normal. An oval, tender tumour, resembling a prolapsed ovary could be felt in Douglas's pouch. The abdomen was not distended, but there was slight dulness in the left iliac region, which was very tender to the touch. There was no difference in the two sides on measurement. The lower margin of the liver extended for some distance below the ribs, and there was some epigastric tenderness, but the other organs appeared healthy.

After consultation with Dr. Gervis, Mr. Sydney Jones took the patient under his care on February 19th, and performed abdominal section on the 23rd. Under full antiseptic precautions an incision about two inches in length was made in the median line above the pubes, and after opening the peritoneum and examination of the uterine appendages, this was prolonged somewhat upwards and downwards. Both ovaries were found enlarged, and in connexion with the right a cyst was felt and seen. The intestines were drawn upwards and to the left, and the right ovary more fully exposed. Apparently springing from the back of the Fallopian tube was a small cyst, thin walled, with a network of vessels spreading over the wall. The ovary was cystic, and was removed with the cyst after the application of a double silk ligature to the inner side of the cyst and the Fallopian tube. The left ovary was then examined, and found cystic and pendulous, one of the larger cysts giving way during the manipulation. The Fallopian tube was congested; this was removed in a similar manner. After careful cleansing of the parts, deep silk sutures were passed through the abdominal wall, not, however, including the recti. Superficial catgut sutures were also passed. The full antiseptic dressing was employed.

Feb. 24th.—A subcutaneous injection of one-fourth of a grain of morphia was given last evening, but she had a restless night. Pulse weak, 104. Suffers from flatulence, but has had no vomiting. Temperature at 8 P.M. yesterday, 98·4°; this morning at 2 A.M., 101°; at 8 A.M. 100·6°.

25th.—Catamenia commenced this morning. Temperature 102°. Slept fairly well; complains of great thirst and headache; pulse 124. Taking half a teaspoonful of milk every half-hour, with ice every alternate half-hour.

26th.—Has been very restless, and had slight delirium during the night. Is having injections of morphia. Temperature A.M., 103·2°; 8 P.M., 100·4°.

27th.—She is very restless, tries to get out of bed, and to remove the dressing. She has no pain, and slept for six hours during the night. Pulse 96; tongue dry and furred. The wound was dressed on the 26th, and was looking well; some stitches were removed.

March 1st.—Taking food well, quieter, and sleeping well. Pulse 108.

2nd.—Has flatulence and pain about the lower abdomen. Pulse 100. Temperature from 99·6° to 100·4°. An enema was administered; there was much pain caused, but no action of the bowels.

3rd.—Slight suppuration found in the lower part of the wound; vomited in the evening. Highest temperature 99·6°.

The bowels acted after an enema on March 6th. On the 10th the union of the wound was found to have partly

broken down, and there was a good deal of suppuration The dressing was changed to fomentations of hot boracic acid lotion. On the 6th, 7th, and 11th she vomited once, and between the 8th and 13th there was marked distension of the abdomen, with pain and flatulence, but with remarkably little tenderness or elevation of temperature, which only exceeded 100·6° on one occasion, and was not higher than 99·6° after the 11th. On the 17th the patient was able to eat fish. The wound was healed. From this date until the 21st she had rather severe night sweats, but no other symptoms. An abdominal belt was ordered, and she left the hospital on March 29th. Throughout, after the operation, the diet was most carefully regulated.

CASE 2.—*Hydro-salpinx; Abdominal Section; Cure.*—A. L.——, aged nineteen, was admitted under the care of Dr. Gervis (Adelaide Ward) on April 29th, 1886. She had been in good health until four years before, when she was delivered of a child at full term. She got up a fortnight after the confinement, and has never been well since. The catamenia began when she was thirteen years of age, continued regular until the pregnancy, recommenced two months after delivery, continued regular for three months, then ceased for two or three months, and have been irregular since, lasting from four to five days. Five months after the confinement a pessary was introduced owing to some prolapse of the uterus; this was worn for eighteen months. She has had dragging pain in the lower part of the back and hypogastrium, also pain in the groins, especially the left, ever since the confinement, with slight leucorrhœa between the periods.

On admission she was complaining of this pain. On examination there was some swelling of the abdomen, and tenderness in the left iliac fossa. The measurement from the umbilicus to the left anterior superior iliac spine was half an inch less than the corresponding one on the opposite side. The uterus was found on vaginal examination centrally placed, but with impaired mobility. The sound passed easily and without pain. The axis was normal in length and direction. High up in the left fornix a softish elastic swelling could be felt; this was very tender.

May 8th.—She is complaining of headache and pain in the abdomen. The period which has just terminated was rather more profuse than usual, and was accompanied by a good deal of pain. Since admission she has been taking medicine containing bromide of ammonium and tincture of hyoscyamus.

11th.—Temperature 97·8°. General condition satisfactory; no evidence of disease other than that for which she was admitted. This afternoon, at 2 o'clock, Mr. Sydney Jones, under whose care the patient had now been placed, after consultation with Dr. Gervis, performed abdominal section. An incision about two inches long was made in the middle line down to the peritoneum, which was carefully opened after the arrest of all hæmorhage. The ovaries and Fallopian tubes were then carefully examined, and in connexion with the left Fallopian tube a rounded soft tumour was felt, the tube itself being distended near it. The original incision was extended towards the pubes, the intestines held tightly, and the tumour and left ovary brought to the surface, but not without difficulty. The tumour was seen to be a thin-walled pedunculated cyst, containing a dark sanguineous fluid. There were some small cysts, with clear contents, in the broad ligament. The pedicle was transfixed, and secured with a double silk ligature, and the cyst removed. The ovaries were healthy. Deep silk sutures were passed, including the peritoneum, and superficial catgut sutures were passed between them. The operation was performed under the carbolic spray. Ordinary antiseptic dressing was applied, also salicylic wool, the dressing being secured in position with gauze bandages, a flannel roller being firmly applied over all. She vomited at 6.30 P.M., after the ether. A subcutaneous injection of a quarter of a grain of morphia was given, after which she had a good night.

12th.—She is very restless and slightly delirious, constantly calling for drink. She has been allowed small quantities of ice every hour. She complains of pain in the abdomen and loins. Temperature 100·2°; skin hot. Thirteen ounces of urine drawn off by catheter since the operation.

13th.—Did not sleep well during the night, although she had three injections of morphia during the previous day, the last being at 9.30 P.M. Quantity of urine small; six ounces during the night.

14th.—There is tenderness over the iliac and hypogastric regions, but no abdominal distension. She has complained of pain and been very restless during the night. Tongue dry and furred; very thirsty. Pulse 102; temperature 100·4°. Is allowed to pass urine without the catheter. The wound was dressed under the spray. There was complete union, and the deep stitches were removed.

15th.—Pulse 100, weak. Patient improving.

19th.—Bowels relieved by a simple enema. Sleeps well after morphia; is not restless; still complains of some pain in the abdomen and round the loins. Tongue furred and red at the edges. Temperature last night 101°; this morning 99·8°.

22nd.—Wound redressed; some suppuration in the lower part; there is no pain or tenderness in the abdomen.

On the 28th the wound was redressed, and strapping applied across the abdomen above and below a point where union had partially broken down. There was slight tenderness on pressure over different parts of the abdomen.

The patient, who was very nervous and intolerant of control, was very carefully dieted for some time after the operation, being only allowed fluid nourishment until the 22nd, when custard was ordered; the temperature rose that evening to 101°, and fluids were again given; solid food not permitted for some days later. There was no rise of temperature after the 19th. She left the hospital on June 17th, having been provided with an abdominal belt.

EDINBURGH ROYAL INFIRMARY.

A CASE OF RUPTURE OF THE BLADDER; LAPAROTOMY.

(Under the care of Mr. J. DUNCAN.)

FOR the following report we are indebted to Mr. Henry B. Melville, resident surgeon.

Wm. E——, aged thirty-eight, was admitted at 10 P.M. on May 5th, 1886. The patient stated that about 5 P.M. that day one of the wheels of a cart, which with its contents weighed about 25 cwt., had passed over the lower part of his abdomen. He complained of abdominal pain of a somewhat spasmodic character, and aggravated by movement. He said that he had passed no urine since about four o'clock, and that he felt intense desire to micturate, but was unable. A history of stricture was obtained.

On examination, no evidence of fracture of the pelvis or of injury to the spine was found, but there was considerable bruising and abrasion of the front of the thighs at the upper part. The abdomen was distended, resonant, and very tender to touch. There was no absolute dulness over the pubes. An attempt was made to pass a catheter. From the presence of an extremely tight stricture near the triangular ligament and numerous false passages, it was found impossible to pass the smallest instrument, even after the use of a hot bath and morphia suppository. The patient while in the bath passed a small quantity of blood-stained urine with great difficulty. No further attempt was made to pass instruments that night. The patient slept for about nine hours, and awakened with the pain still unrelieved. In the morning the temperature was 99·8°. There was vomiting with distension and tenderness of the abdomen. The pulse was regular, but rapid, small, and hard. At 2.30 P.M. Mr. Duncan saw the case, and tried, without success, to get an instrument into the bladder. Aspiration over the pubes was performed, but no fluid came through the cannula. Chloroform was administered, and a full-sized bougie was passed down to the stricture and cut down upon. The stricture was divided on a probe, and Mr. Duncan passed his finger into the bladder and was able to explore all its extent except the upper part of the posterior wall. Pressure above the pubes and on the anterior wall of the rectum failed to bring that portion of the bladder within reach of the finger. The fluid which escaped from the bladder when it was opened appeared like turbid urine and was small in amount, and afterwards there came away a quantity of material which looked suspiciously like semi-liquid fæces; but no fæcal odour could be detected. Fluid injected into the bladder through the perineal wound was only partly returned. Mr. Duncan now considered the existence of a rupture of the bladder almost certain, and thought it possible that the presence of what looked like fæcal matter might be accounted for by the existence of a rupture of some part of the intestine. He therefore determined to open the abdomen and thoroughly wash out all urine and other foreign matter, and examine the bladder from above,

and as far as possible the intestine. When the transversalis fascia was reached it was seen bulging forward with fluid behind. When the opening was completed a strong rush of blood-stained fluid took place. The exploring hand detected a rupture on the upper and posterior part of the bladder wall. It was about two inches and a half in length, and ran from above downwards and to the left. No injury to the intestine could be made out, and no material similar to that which came from the bladder was found. The abdomen was thoroughly washed out with hot water, a glass drainage-tube passed into Douglas's pouch, and the rest of the wound was closed by gut sutures. A drainage-tube was passed into the bladder through the perineal wound.

After the operation the sickness still continued. The pulse was weak and rapid, respiration also rapid; but the patient stated that his pain was very much less than before operation. Urine passed freely by the tube in the perineum, and a small quantity of bloody serum was from time to time sucked up through the glass tube from the abdominal cavity. Next day (Friday, May 7th), the patient's pulse had improved, and the pain was still less. There was still some distension of the abdomen, with tenderness on pressure; but the patient passed flatus freely. The temperature, normal at midday, was 99·6° F. at night, and the urine was flowing freely from the perineal wound. Towards evening it was observed that the flow of urine was lessening, and after midnight it ceased entirely. The sickness still continued, and nutrient enemata were given throughout the day. The amount of serum drawn off from the abdomen was less, and there were some lymphy flakes in the discharge

The following day, May 8th, the suppression of urine still continued; the patient was visibly weaker, and was still vomiting. Respiration shallow, rapid, entirely thoracic; pulse weak (120). No pain except on vomiting. During the day the following medicine was repeated every two hours: One drachm of sulphate of magnesia, ten grains of carbonate of magnesia, in half an ounce of peppermint water. In the afternoon the sickness had very greatly abated, the patient being able to tolerate small quantities of iced champagne by the mouth. By the evening the patient's condition had somewhat improved, and the pulse was less rapid and fuller. The suppression of urine still continued, though constant hot fomentations were applied to the loins, and repeated dry cupping was resorted to.

9th.—Early on Sunday morning the patient became rapidly more collapsed, with cold extremities and scarcely perceptible pulse. Ether was given hypodermically and the amount of champagne increased, and the patient rallied for a few hours, but in the evening he again sank, and complained of increased abdominal pain. About 8 P.M. one-third of a grain of nitrate of pilocarpine with twenty minims of sulphate of ether was given hypodermically, but produced no sweating, only profuse salivation. The patient died at 9 P.M.

At the post-mortem examination the body presented the following appearance:—There was very little peritonitis, but around the drainage-tube some matting together of the intestines. There was a considerable effusion of blood behind the peritoneum on the left side, extending as high as the left kidney. No communication existed between the rectum and the bladder, and no rupture of the bowel at any point. The bladder wall was thickened and fibrous, with numerous hæmorrhages into the submucous tissue. There was in the posterior wall to the right side a rupture, about two inches in length on the peritoneal and an inch on the mucous aspect of the bladder. The margins of the wound were beginning to unite, but the adhesions were soft and easily broken down. A dense mass of cicatricial tissue was seen in the urethral wall in front of the bulb, at the seat of the stricture, and several old false passages. The kidneys were pale, cortex thickened, capsule slightly adherent at points, indicating probably some interstitial change with fatty degeneration of the epithelium of the tubules. Liver fatty; hypostatic congestion of both lungs; some thickening of the wall of the left ventricle of the heart; valves competent.

A MUNIFICENT GRATUITY.—A gratuity of £10,000 has been granted from the Bavarian Civil List to the widow of Professor Guden of Munich, who perished with the late King of Bavaria in the lake at Castle Berg. He left a family of eleven children.

Reviews and Notices of Books.

Investigations into some Morbid Cardiac Conditions. By WILLIAM RUSSELL, M.D., M.R.C.P. Edin. Edinburgh: Bell and Bradfute. 1886.

THERE are few subjects more interesting to the clinical observer, or which have given rise to greater controversy, than the correct interpretation of the cardio-vascular phenomena that characterise the anæmic state. This subject forms the major part of the volume before us, and we may honestly say that we have seldom had it presented in a clearer light. It is introduced by a historical retrospect upon the question of inorganic murmurs, and it is satisfactory to find that the share taken by Hope, too often overlooked, is fully recognised. Dr. Russell brings the results of observations in the post-mortem room to disprove the statement of Walshe and Balfour that the pulsation in the second left interspace is due to the left auricle. He shows conclusively—by cardiographic tracings as well as by morbid anatomy—that such pulsation is of right ventricular origin. Indeed, he assigns a far larger share to the right side of the heart than is usually given it, and we must think that he does well in reminding us that we have to reckon with two sides rather than one. The steps of his argument, supported by numerous observations—that the basic murmur in chlorosis is a tricuspid regurgitant murmur, and that no arterial murmur (other than an artificial one, produced by pressure of the stethoscope) exists,—must be followed in the work itself, for we cannot do justice to it here. As to venous murmurs, he is of opinion that the quality of the blood is a factor in their production, but that more or less constriction of the vessels is the essential element. There is also an interesting chapter upon tricuspid murmur and mitral stenosis, and one upon the differential diagnosis of vegetative or verrucose endocarditis. The book is one which shows the author to be a careful clinical observer, and it cannot fail to be read with profit both for the facts it brings to light and for the ideas which it suggests. He has chosen topics which rank among the most debatable as well as those which are least studied in cardiac disease, and he has materially added to our knowledge of them.

Medical Missions: their Place and Power. By JOHN LOWE, F.R.C.S.E., Secretary of the Edinburgh Medical Missionary Society, and Superintendent of its Training Institutions. With Introduction by Sir WILLIAM MUIR, K.C.S.I., LL.D., D.C.L., late Lieutenant-Governor, North-West Provinces of India, and Principal of the University of Edinburgh. London: T. Fisher Unwin. 1886.

MR. LOWE'S book is one that was much needed, and for writing which his experience as a medical missionary in Travancore and his long connexion with the Edinburgh Medical Missionary Society well fit him. The medical mission work and the training of medical men for it, as far as Great Britain is concerned, have had very much to do with Edinburgh, and to give an account of the work of the Edinburgh Medical Society is virtually to survey the whole field. The Edinburgh movement began with Dr. Abercrombie, who was chosen President of the Society, which originated in a meeting in his house, at which an account was given of the work of Dr. Parker, an American medical missionary, who had laboured long and successfully in China. Charity begins at home, and so it was with this good movement. Dr. Handyside, an anatomist and surgeon of great accomplishment, obeyed the request of the city missionary to see bad cases among the poor of the Cowgate. Then the poor of Ireland were the first objects of attention of the Society. Now the Society has a local institution for the training of medical

missionaries, to which all the great societies refer, and from which some of the best medical missionaries have hailed. It cannot be too clearly realised, however, that to the piety of its great local physicians and surgeons Edinburgh owes the creation and success of the Society. Abercrombie, Alison, Handyside, Miller, Coldstream, and Benjamin Bell are classical names in Edinburgh medical history, and they were all active promoters of this Divine cause. If anyone doubts the impression for good made on uncivilised or unchristianised nations, he has only to read this book, though it by no means exhausts the statement of medical work done or impression made. One very excellent feature of Mr. Lowe's book is his insistance on the thorough and complete training and qualification of those, whether men or women, who go out to do medical missionary work. Their surgical and obstetrical training should be even more complete than that of average practitioners, seeing that they have no help in consultation or co-operation with others, as in difficult cases at home. The rapid progress of this Society is gratifying. In 1861 its income was £590; in 1871, £1314; in 1881, £5506; while during the last decade £15,000 were raised for special objects. There are at present 170 qualified medical missionaries in active service at home and abroad, whereas before 1871 only thirty were in the field. Can London say that she has done her share in this useful work? The noble and devoted Robert Moffat said that a medical missionary was a missionary and a half, or rather a double missionary. Many other generous testimonies from clerical colleagues to the value of medical pioneering in missionary work are given in these pages, which leave no doubt that, as the early history of Christianity was associated with great gifts of healing, so its extension is to be. We earnestly commend this book to the sympathy and attention of our readers.

Handbook for the Instruction of Attendants on the Insane. Prepared by a Sub-committee of the Medico-Psychological Association. London: Baillière, Tindall, and Cox. 1885.
Lectures on the Care and Treatment of the Insane, for the Instruction of Attendants and Nurses. By W. C. WILLIAMSON, M.D. Paramatta. Printed at Sydney. 1885.

THE intention of the short manual of sixty pages issued under the auspices of the Medico-Psychological Association is of the most commendable kind, there being no greater desideratum in the treatment of insanity than well-trained and instructed attendants. The directions given for nursing and general duties are well compiled; while the information in regard to the forms of mental disorder and the directions as to the management of the different mental states are also distinctly good. The epitome of anatomy and physiology, however, with which the handbook begins, is of doubtful value and might confuse rather than instruct. On the whole, the handbook is a decided advance on the usual manuals of rules and instructions in use in asylums.

Dr. Williamson's Lectures are deficient in the amount of instruction and direction given in reference to the special management of the insane, and are redundant in information in regard to the treatment of diseases. They are, however, satisfactory in bearing testimony to the recognition in Australia of the importance of training attendants.

AN International Congress of Hydrology and Climatology will be held at Biarritz from Oct. 1st to 8th. The work of the Congress will be divided into, and papers read on, the three following sections:—Scientific hydrology, medical hydrology, and climatology. Numerous excursions have been arranged, and we are assured that a hospitable reception awaits those who attend the meeting from its promoters.

Two deaths from eating poisonous fungi in mistake for mushrooms have just occurred at Nottingham.

New Inventions.

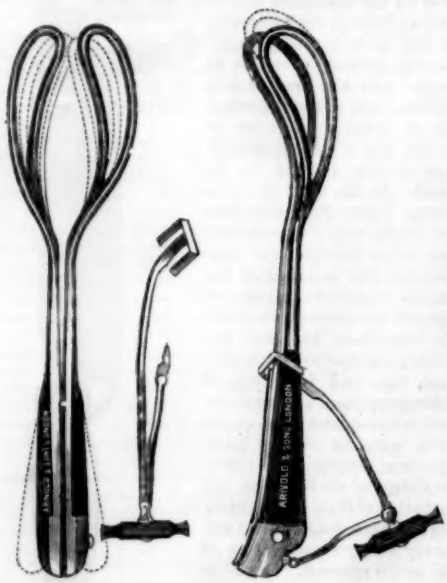
A NEW AND IMPROVED CLAMP FOR HÆMORRHOIDS.

THE method of crushing piles, instead of dealing with them by ligature, was an important advance in rectal surgery, and the question of the best form of clamp has followed naturally upon the adoption of the operation. The use of existing instruments during a term of years led the inventor of the present clamp to consider, with considerable interest, how far the necessities of the operation were met by the crushers at present existing, and how their shortcomings might be rectified. To many surgeons Benham's clamp has commended itself by its power, but at best it has always appeared a heavy and unwieldy weapon. To others Allingham's fenestrated crusher has been acceptable, as a distinct improvement, by its greater handiness, as compared with the former; but admirable as this undoubtedly is, there are certain points to which exception may fairly be taken—notably, that the pile seized by the tenaculum has to be drawn through the fenestrum, and that as by necessity a considerable amount of tissue is brought into the area of the crushing bars, a larger surface than is strictly necessary is crushed, and a correspondingly large wound remains to be healed. In the hope of overcoming these objections this new clamp was designed, and after much thought and consideration the principle of the familiar "spanner" or "screw-hammer" was adopted as a model. The instrument has been admirably manufactured by Messrs. Maw, Son, and Thompson, of Aldersgate-street, and whatever fault is found with it by expert rectal surgeons or the practitioner at large must be laid to the charge of the inventor, and not to that of the manufacturers. The accompanying woodcut will convey a very excellent idea of the *modus operandi*. It will be seen that the principle of the lever action has been discarded, and that the crushing power is obtained in a direct line by screw action, as in Allingham's, with this difference, that whereas in the latter the lower bar is forced upon the upper, here the upper bar is drawn down upon the lower. A slow screw has been adopted, as giving greater power to the operator. It may be contended that greater power is obtained with the older instrument, but in the opinion of the writer too much stress has been laid upon the power actually required for the complete destruction of the tissue; and, moreover, actual experiment has shown that the present instrument can be credited with the possession of a positively increased crushing power, while the results obtained have been sufficiently conclusive and successful to warrant the claim advanced for it as an "improved clamp," and as such it is confidently placed at the disposal of the profession.

CHARLES JOHN SMITH,
Formerly Surgeon to the Farringdon Dispensary.
Selborne-road, Brighton, August, 1886.

AN AXIS-TRACTION MIDWIFERY FORCEPS WITH SLIDING BLADES.

I DESIRE to invite attention to a midwifery forceps recently produced by Messrs. Arnold and Sons, of West Smithfield, embodying in a shapely fashion some suggestions of mine intended to increase the adaptability of the blades to the fœtal head, and to secure axis traction by as simple a mechanism as possible. The pelvic curve of the blades, now generally adopted, prohibits that free rotation about the long axis which with the straight forceps enables us to select the cranial meridian best suited to their application, and, in the absence of any compensatory adaptive movement, the restriction proves often a source of weakness and embarrassment. This is especially noticeable, for instance, when the head is detained above the brim in a transverse position. Here the occiput and the forehead suggest themselves as good resting-places for the blades; but, as an unfortunate rule, they are situated at very different obstetric altitudes, and the English lock peremptorily insists on symmetry. Hence, in order to get any hold on the forehead



with the one blade, its fellow has to be pushed beyond the occiput, as far indeed as the fœtal anatomy will allow, and then a very unsatisfactory grip is obtained, effected mainly by the tips of the blades, and causing proportionally severe pressure marks. These I have several times observed to be located, one between the orbits and the other close upon the vertebra prominens, and, in a case of spinal disease involving that vertebra, the mother tells me her infant had been badly cut just there by the instruments used to accomplish delivery, as well as on the upper part of the forehead, where a large scar is visible. With a sliding movement such faulty dispositions of the blades as the above imply seemed improbable, and my experience of the new forceps accords with this expectation; for I have found them to be secure in their grasp and gentle in their dealing with the integuments. The illustrations afford a good idea of the instrument; but on an exact side view the blades do not appear to join the stems at an angle, and the handles are seen to be slightly recurved at the lock. Longitudinal, somewhat circular sliding movement is provided for and controlled by two pins in the one handle and corresponding grooves in the other. The proximal pin, working as a screw, can be varied in length, and determines the span of the blades. Locking is effected by a separate piece, and the axis-tractor easily applied after the introduction of the blades, which it unites rigidly together under the simple operation of tractive force applied to its handle, whilst between the pains it can be unshipped at will by a slight push. Owing to the length of the stems the lock is always quite outside the vulva. There is no screwing together of the handles, and the head can be relieved of pressure by a turn or two of the proximal pin or by undoing the lock. One hand on the handle of the tractor commands the whole instrument. Regarding axis-traction, I would only remark that my experience convinces me its advantages have not been over-rated. The saving in muscular effort far exceeds my anticipations, and the probability of misdirecting the power seems very much lessened.

W. MC LAURIN, M.B., C.M.Glas.
Richmond-road, Barnsbury, N., Aug. 1886.

THE BRACHIONIGRAPH.

THIS instrument is a patented invention designed with a view to render the art of writing possible in the absence or uselessness of the hand. It can be thus adopted in cases of writer's cramp, certain cases of paralysis of the digits, and in loss of the distal extremity of the upper limb. The instrument is of sufficiently simple construction. It consists of a long light strip of iron, curved so as to be easily adapted to the ulnar border of the forearm. This splint is sewn into a casing of supple leather material, which is also shaped so as to form a kind of gauntlet or sleeve to the forearm. The gauntlet is fastened to the forearm by an ingenious arrangement of a screw hooks and studs, allowing of a very adjustable degree of pressure. The bar or splint carries at the distal end a mechanism with a universal joint, by means of which a pen may be held in any desired position. With this instrument the act of writing is performed by the muscles of the arm and shoulder, whilst those of the digits and thumb are thrown completely out of use. It is very easy to acquire the necessary dexterity for legible "handwriting." The invention is the work of Mr. W. Macgill, of the Academy, Fraserburgh, N.B.

DR. WRIGHT'S HYGIENIC DOWN BED QUILT.

THE advantages and usefulness of ventilating coverlets may now be said to be fully proved. The methods by which the quilt is rendered pervious to the exhalations of the human body during sleep are, however, somewhat varied. That adopted in Dr. Wright's quilt, in which lace insertions are introduced from the sides and the four corners to the centre, whilst contributing to beauty of appearance, is also very efficient in securing free ventilation, which has been the chief object aimed at by the designer of this handsome coverlet. It is manufactured by Mr[s] R. Thornton, Goldsmith-street, E.C.

IMMISCH'S PATENT METALLIC THERMOMETER.

THIS excellent little invention has received an additional improvement in the form of a screw mechanism attached to the ring of the watch. By its means the ring can be removed and its place taken by a long stem of whalebone. The object is to make the thermometer available for taking the temperature of the body in the vagina and rectum; it also, in our opinion, renders the registration of the mouth temperature more easy of attainment. The instrument may be obtained of all scientific instrument makers and opticians.

THE fourteenth annual meeting of the American Public Health Association will be held at Toronto, Canada, from Oct. 4th to 8th.

THE BRITISH MEDICAL ASSOCIATION.

MEETING AT BRIGHTON.

THE following is the conclusion of our report of the proceedings in the Public Medicine Section on the 6th inst.

Dr. WILLIAM SQUIRE read a paper on the Influence of Increased Means of Isolation in Checking the Prevalence of Scarlet Fever in London. Infectious diseases, like small-pox and scarlet fever, are not, said the author, checked by such general sanitary improvements as are efficacious against enteric fever and diarrhœal diseases. Improved drainage and water-supply reduced the deaths from enteric fever in England and Wales—first, from 20,000 to 15,000, and then, since 1879, to less than 8000 annually. All this time the scarlet fever mortality, except for the years 1860-61, is about 12,000 annually, with epidemic leaps, as in 1864 and 1874, to 20,000 or 30,000. In London alone the mortality from this cause (the first year of compulsory school attendance) exceeded 6000; until the last two years this has always exceeded 2000. Last year this was reduced to 700, and for the first quarter of the present year to 102, about half of the previous year, or less than one-third of that of 1884. This lowest number ever registered for London is coincident with increased means of isolation and improvement in its method. Small-pox and scarlet fever must be noted in this connexion; they, with typhus, are the only true infectious diseases which have been dealt with on a large scale by isolation, and the means devised for the first have been adapted to the others, with such modifications as their different natures required. Typhus was soon arrested, but the other two, besides special wards and hospitals, required convalescent establishments. It is well known how rapidly and completely the last small-pox epidemic collapsed after the convalescent camp at Darenth was in full action. In dealing with small-pox, hospitals alone might have sufficed, for the first action of the London Asylums Board hospitals was to reduce the small-pox mortality in London from 9698 for the two years 1871-72 to 113 for 1873, and to 103 only for the two years 1874-75, lower figures than had ever till now been known for small-pox in London. Litigation and ill-advised restrictions had so far interfered with these means, that when, in 1876, small-pox reappeared in the north and north-east of London, there was no hospital of the Board open except the one at Stockwell. Next year hospitals at Fulham and Deptford were constructed, to aid the one at Homerton. At Fulham 320 acute cases were received in six months; of these 138 came from Kensington, 80 from Chelsea, and 39 from the Fulham district. Small-pox, which was extending in the neighbourhood before the hospital was open, had subsided in July, when it was in full use. Altogether 11,000 small-pox patients were treated in these hospitals, but the mortality showed that not half the severe cases had been isolated. In 1881 the transference of convalescents to Darenth much relieved the London hospitals. In 1884 and 1885 the increased accommodation and the use of two hospital ships at Dartford, with steam launches fitted as ambulances, had reduced the mortality to *nil*. From February, 1884, to the end of 1885, upwards of 11,000 sick and convalescent were thus safely sent down the river by these steam ambulances. Altogether 10,718 cases were treated in the hospital ships. Last year there were 5644 admissions; 4069 direct from their homes, 1575 from other hospitals. The deaths were 444, being a mortality of 7·6 per cent. Dr. Bird Wood, in his report (page 7), says the severe cases are treated together. "On the *Atlas* 30 acute cases have been in bed at the same time on one side of the deck. On the *Castalia*, 20 beds in No. 3 ward and 14 in No. 8 have been occupied by confluent cases for several weeks. Neither patients nor staff were injuriously affected." The extensive arrangements made by the Asylums Board for convalescents from small-pox enabled more and more space at their different London hospitals to be set aside for fever cases, and especially for scarlet fever; much may be done by an intelligent isolation at home of scarlet fever patients where the nature of the dwelling makes it possible. One reason why diphtheria has gone on increasing in London, while scarlet fever has been reduced to the lesser mortality of the two, is that our means for isolation of the sick hardly touch diphtheria any more than they do measles or whooping-cough; the increase of those diseases is chiefly kept up by schools. Even if it be premature to attribute the great subsidence of two epidemics exclusively to isolation, it is well to insist on the coincidence; for the period for epidemic increase of both is at hand, and neither Winchmore Hill nor Darenth are completed. Instead of deferring those works till the new increase appears, we ought to be beforehand with the first evidence of such increase. In the case of scarlet fever, too, isolation is our only defence; no personal immunity, as by vaccination, can be acquired.

On the question of the Duration of Infectiousness in Scarlatina, Small-pox, Measles, Mumps, and Diphtheria, Mr. VACHER (Birkenhead) said it seemed to him that a very great change had taken place in professional opinion in respect of the time when infectiousness commences or may commence. It used to be held and taught that the diseases under consideration, especially scarlatina and small-pox, were but slightly infectious during the early stages, and that, at all events if the patient were isolated as soon as the disease could be diagnosed, no risk would be incurred. Then as evidence accumulated that subjects who showed no rash or sore-throat occasionally communicated disease days before they were suspected of having it, this opinion became untenable. In particular, there was abundant testimony that measles was very infectious for fully four days before the appearance of the eruption. Now current opinion declared that possible infectiousness commenced with the manifestation of the earliest physical sign of disease. Quite lately Mr. Vacher was led to question the soundness of this doctrine as to the beginning of infectiousness. It is doubtless within the truth to say that infectiousness is not very active as long as the disease is wholly latent. Still, approaching the question from this direction, it appeared to him that the only defensible position to occupy is to admit the possibility of infection from any infected subject—that is, during the whole latent period. For the first twenty-four hours after inception, it may be, the risk of infection is almost infinitesimal, but it probably increases hour by hour, and Mr. Vacher sees no reason to infer that it is much less just before pyrexia than just after, or much less on the eve of the eruption than when the eruption is fully out. The result of accepting the propositions put forward would be that practitioners and officers of health would advise and take steps for the isolation of all subjects exposed to infection, as far as practicable. It may be said that this has been done already in districts where so-called "houses of detention" have been provided. This is so, but the avowed object has always been to take time by the forelock and be prepared for a possible danger in the future, and not under the apprehension that the subjects separated so long as they appear well could be themselves infectious. The question of the duration of infectiousness resolved itself into two distinct inquiries — (1) When does it begin? and (2) When does it end? It remained to discuss question No. 2. There was little difference of opinion as to the lines on which this question was to be

TABLE SHOWING DURATION OF INFECTIOUSNESS IN SCARLATINA, SMALL-POX, MEASLES, MUMPS, AND DIPHTHERIA.

	Scarlatina.	Small-pox.	Measles.	Mumps.	Diphtheria.
Time from inception to first precursory sign	3 days	12 days	10 days	14 days	3 days
Time from inception to commencement of eruption, of glandular swelling in mumps, and sore-throat in diphtheria	4 days	14 days	14 days	18 days	5 days
Time from inception till infectiousness ceased	5 weeks mean, 10 weeks max.	5 or 6 wks. mean, 15 or 16 wks. max.	4 weeks mean, 8 weeks max.	5½ weeks maximum	3½ weeks mean

answered. Infectiousness terminated as soon as all infectious matter was eliminated. The practitioner sought to encourage this elimination, to sterilise the infectious matter eliminated, and to state when the process was completed. Mr. Vacher then proceeded to consider the length of time taken to eliminate all infectious matter in the case of each of the five diseases named. His experience of upwards of ten years as physician to the Birkenhead Fever Hospital and elsewhere enabled him proximately to set a limit to this time. A summary of his conclusions as regards the five diseases is given in tabular form above. Mr. Vacher remarked, in conclusion, that while it was possible, as regards cases isolated and treated, to set a limit to their infectiousness, there was almost no limit to the infectiousness of cases neglected and left at large. He had known of patients suffering from small-pox, scarlatina, and measles wandering about and going from lodging to lodging, sowing infectious particles in a town as a man sows wheat in a field; and he was assured that all the sweeping and scavenging, and "vague chemical libations and powderings," which urban authorities put faith in, would not prevent the crop from coming up.

Mr. PHILIP BOOBBYER (medical officer of health, Basford Rural Sanitary Authority, South Notts) read a paper on Scarlet Fever in relation to the Disturbance of Impure Subsoil and the Construction of Sewers. The Greasley division of the Basford Rural Sanitary District, South Notts, comprises an area of 24,230 acres, with a population of about 31,000, which is divided between several small townships, such as Kimberley and Eastwood, many colliery and agricultural hamlets, and scattered rural dwellings. Artificial drainage is exceptional, the soil and subsoil mostly porous, and the surface frequently much polluted with accumulated organic refuse. Scarlet fever, during the past five years at least, has been more or less endemic at its northern and southern extremities. At the beginning of December, 1884, a few scattered cases only existed among the rural population of the north; but after this date the fever spread, though slowly and unequally, along the eastern slope of the Earwash Valley. In the following February, during this slow extension, two hamlets widely separated from one another, and from direct sources of infection, were almost simultaneously invaded to a very general extent, whole families being attacked at once. In both these villages considerable surface- and sub-soil disturbance had taken place, with a wide distribution of long-accumulated midden contents as manure. Many cases of enteric fever and diarrhœa, and much health depression, existed contemporaneously. There was no diphtheria, however, and no tendency to epidemic extension of any disease but scarlet fever. The type of the latter, though distinct, was mild, and the death-rate exceptionally low. This epidemic rapidly declined during March. Towards the end of April, scarlet fever reappeared in the south—at the outskirts of the Kimberley township, where excavations had been commenced for a new sewage system. The fever spread here in a remarkably general way, following the course of the excavations in all directions. The place had been visited by it in February to a slight extent, but this renewed epidemic filled up the gaps left by the previous visitation, and in many cases, again, affected whole families at once. Its generalness was especially marked in an outlying part of the township, chiefly inhabited by colliers, which up to this time had been altogether undrained. The epidemic continued during the progress of the sewage works, its final disappearance being almost coincident with their completion. The mortality here, as elsewhere, was extremely low, not exceeding 3 or 4 per cent. of those attacked. Septic glandular symptoms were common, the submaxillary glands suppurating and even discharging pus from their ducts in many cases; such symptoms, however, were not usually of very serious augury. Several cases of late and deferred desquamation were observed, and many instances of second attack in the same individual reliably attested.

NEW HOSPITAL AT HASTINGS.—The memorial stone of the new Hastings, St. Leonards, and East Sussex Hospital, which is being erected at White Rock, opposite the pier, was laid on the 24th inst., by Lord Brassey, of Bulkeley. The structure is estimated to cost £20,000, provides for about 70 beds, and will probably be finished towards the end of next spring. At the close of the ceremony contributions amounting to over £500 were handed to the secretary.

THE MEDICAL ACT OF 1886.

To the Editor of THE LANCET.

SIR,—In reply to "Nemo" in your issue of the 14th inst., I might venture to add "Mortalium omnibus horis sapit"; but "audi alteram partem." The Act of 1886 is retrospective as to recognition of diplomas otherwise than British. It is ridiculous to imagine anything so absurd as expecting American M.D.'s settling here to practise under such unfavourable conditions as the above Act will place them in in the future. Rather ought we to look at home first, and by our united efforts endeavour to prevent the hosts of unqualified practitioners from treading on our toes. To quote the *Eastern Argus* of the 14th inst., where a juryman at an inquest remarks that "one of the most menial servants, a boot-cleaner or dish-washer, might be termed a doctor's assistant, and sent out to attend patients." That this is practically the case I could easily confirm if called upon. But as regards the American Faculty, I must protest against the insinuations of your correspondent, as they are calculated grossly to mislead professional opinion. The subject is so well worn that it would appear superfluous to reiterate facts—viz., that it is not possible to obtain a diploma from any recognised school of medicine in America without having studied three years and passed the required examination before the Faculty. As a pupil of the late Dr. Austin Flint, I can safely say that a more eminent body of men (of which he was the Professor of Medicine) did not exist in my time. But contrast this with the Brussels M.D.: a man simply goes to that town, and after passing an examination is instantly dubbed M.D. Which is the most reliable qualification? It has been very much the custom amongst English professional men to look down upon their American *confrères*, without due consideration being given whence they emanate. Because black sheep exist, is everyone bound to be a negro? If so, how can you admit Oliver Wendell Holmes, John S. Billings, and Fordyce Barker to come amongst you? Your diplomas are respected in America; why not leave dirty water alone, especially as so much exists in their own besom. As to "Nemo's" remarks about *time* I think enough has been said; if it comes to *money*—I might say still more; for it certainly cost me a considerable sum before I obtained my M.D. degree.

I am, Sir, yours faithfully,

August 16th, 1886. AN M.D. OF NEW YORK.

DURATION OF INFECTIOUSNESS OF SCARLET FEVER, SMALL-POX, MEASLES, MUMPS, AND DIPHTHERIA.

To the Editor of THE LANCET.

SIR,—In your report of the "Brighton" discussion upon the above subject a list of infectious periods is given and attributed to Dr. Hope. May I correct this account by stating that I began the discussion and gave the table alluded to. Without giving all the details of cases upon which my record is based, but which I reserve for future publication, I submitted the following periods as characterising the infectious stages of the several diseases:—Measles from the second day of the disease, for three weeks; small-pox from the first day, for four weeks; scarlet fever from the fourth day, for seven weeks; mumps from the second day, for three weeks; diphtheria from the first day, for three weeks. Intimately associated with these are the so-called incubation periods. From some exceptional opportunities of observation I have found the following intervals to occur between the definite exposure of the patient to infection and the first symptoms:—Whooping-cough, fourteen days; mumps, eighteen days; measles, ten days; small-pox, twelve days; scarlet fever, three days; diphtheria, fourteen days. The statement about the last-mentioned disease is, I believe, new, as no observations seem to be recorded and nearly all authorities are completely silent. One distinctly says "the incubation period is unknown." From four cases I had reliable opportunities of fixing the period of fourteen days, and in two or three other cases almost exactly the same time elapsed, but there was some difficulty in fixing the exact date of invasion. I am Sir, yours truly,

Haslemere, Aug. 25th, 1886. T. FREDERICK PEARSE, M.D.

THE LANCET.

LONDON: SATURDAY, AUGUST 28, 1886.

THE climatic treatment of disease having thoroughly established itself as one of the recognised resources of therapeutics, the multiplication of health-resorts has gone on apace, favoured by the spirit of an age of travel and geographical discovery. Our ancestors, when in search of health, sought our own southern coasts or the South of France, while Madeira or Egypt marked their furthest flights. Now every zone is laid under contribution, and the most inaccessible regions are freely recommended as affording those climatic conditions requisite for the cure which has baulked the efforts of medical skill. The claims of many of these bran-new and highly-vaunted sanatoria must be pronounced to rest upon the most unsubstantial foundations. Indiscriminate eulogies and unqualified assertions of extraordinary salubrity, penned frequently by persons whose impartiality is not above suspicion, and too often unsupported by a fragment of definite scientific evidence, cannot seriously affect the views or the practice of the profession. It would conduce to the advancement of a valuable branch of our art, and prevent many abortive volumes from ever seeing the light, if it were clearly recognised that any claim on behalf of a new sanatorium must be based upon a long series of careful meteorological records and some modicum at least of detailed clinical evidence. Amidst the excusable bewilderment engendered by the conflicting claims of a multitude of foreign sanatoria, it may not be inopportune to consider how far our own health-resorts meet the increasingly clear indications for the successful climatic treatment of disease.

The health-resorts of Great Britain and Ireland possess at least certain indisputable *primâ facie* advantages. Facility of access, the avoidance of the worry and expense of long journeys, proximity of the invalid to home and friends, superior accommodation and hygiene, and a better food-supply,—these are among the very important advantages which can be claimed for the home as compared with the foreign sanatoria. As against these must be set the inevitable drawbacks of a cool and humid climate, the long, dreary, sunless winter, the interference with out-door exercise and amusement, and the unfavourable influence upon many diseases of the combination of cold and damp. Let us consider how these opposing conditions affect the case of the three chief classes of sufferers who seek climatic treatment—viz., first, the large class of neurotic and dyspeptic patients; secondly, the gouty and rheumatic; and, thirdly, consumptives.

The first class is a very wide one, and includes those who, through over-work, vicious excess, or inherited tendency, suffer from debility of the nervous and nutritive functions. In many such cases climatic treatment is indispensable, but it is not possible to define precisely the meteorological conditions suitable to a group the members of which present many points of diversity. It may, however, be confidently asserted that for the treatment of such conditions it is only exceptionally necessary to go beyond the limits of these islands. If a marine locality be thought desirable, we have upon our extensive coast-line an unparalleled variety of watering-places, representing the most diverse types of local condition and therapeutic influence. Speaking broadly, the health-resorts of the east coasts are stimulating, those of the west, and especially those of the south-west, sedative; while those upon the south-eastern littoral hold an intermediate position. Ramsgate, Cromer, Redcar, and Whitby may be taken as representatives of the first class; Bournemouth, Torquay, Penzance, and Ilfracombe of the second; while Eastbourne, Folkestone, and Hastings are types of the third class. The selection must depend upon the physician's appreciation of the finer points in his patient's case, but it is far from being a matter of indifference, and the indiscriminate recommendation of sea air without regard to the diverse conditions presented by different watering-places is an inexcusable error, which is, we trust, becoming increasingly rare. If the dyspeptic or neurotic sufferer be intolerant of marine influence—a not uncommon phenomenon,—we have a sufficient variety of suitable inland resorts from which to make a selection. If we desire a mild and sheltered locality, for instance, Tunbridge Wells affords these indications; if a more tonic climate be requisite, such resorts as Malvern, with its charming scenery, delightful air, and admirable water-supply, are indicated; while Buxton, Ilkley, Harrogate, Weymouth, and Crieff may be mentioned as examples of health-resorts of the bracing and stimulant type.

For the treatment of the second class of invalids—viz., the gouty and rheumatic—the presence of mineral springs is important, and Nature has not been niggardly in her gifts to us of this kind. Bath, Cheltenham, Droitwich, Matlock, Leamington, Woodhall, and Harrogate in England, Moffat and Strathpeffer in Scotland, and Ballynahinch and Lisdoonvarna in Ireland, are a few of the many natural mineral springs in these islands. Yet the popularity of this class of our health-resorts seems unquestionably on the wane—not from any change of medical opinion, but as a consequence of the fluctuations of fashion and the increasing attractiveness of competing foreign resorts. Bath has not quite recovered its last century celebrity; Cheltenham is now noted less for its waters than for its educational establishments; and a similar tale of decadence might be told of Leamington; while thousands of Englishmen hurry annually abroad to drink at Aix-la-Chapelle or Carlsbad the waters which a former generation were content to take at home. It is certain that the great popularity of the foreign spas is not due solely or chiefly to the superiority of their waters, but rather to the perfection of their methods of balneo-therapy, to the influence of fashion, and the skill with which the foreigner caters for the amusement of his English patrons. If the stream of fashion could be diverted to our own mineral springs, and if the rigorous rules of diet and hygiene which are cheerfully acquiesced in abroad were similarly enforced at home, there can be little doubt that the results attained with us would rival those of the most noted French or German establishments.

The third class of patients seeking climatic treatment is in some respects the most important of all. More is expected from a judicious change of climate in the case

of phthisis than in any other disease, and no question can be more important than to determine how far our own islands afford sanatoria suitable for combating the national scourge. Our consideration may be limited to those health-resorts which are suitable for the winter season, as consumptives usually elect to spend the summer amid their own circle of friends, without regard to climatic conditions. The southern coast has long claimed almost a monopoly of attention in the treatment of phthisis, and the merits and pretensions of Hastings, Ventnor, Torquay, and Bournemouth are familiar to the profession. That the results attained at these resorts frequently rival those gained at Cannes, Nice, and Mentone is unquestionable, and the indiscriminate ordering abroad of every consumptive is much to be deprecated. It must be admitted, however, that the great variability of the English seasons is an embarrassing factor in our calculations, and that there are some winters in which the constant prevalence of snow, rain, or cold winds limits outdoor exercise and amusement to a degree that cannot fail to be prejudicial. Ventnor and Torquay are the mildest of the English resorts, but prove somewhat too relaxing for some constitutions. Bournemouth sets much store upon its pine woods. In cases of stationary phthisis with retention of fair constitutional vigour, the results obtained at the more bracing resorts, such as Hastings or St. Leonards, are often very satisfactory. Less known, but not less noteworthy, are the southern Irish resorts. Queenstown possesses one of the best winter climates in these islands; and Glengarriff, at the head of the charming Bantry Bay, where the arbutus flourishes throughout the year, combines good hotel accommodation and delightful scenery with a singularly mild and genial winter climate.

The question has frequently been raised whether we can obtain within the limits of these islands any approximation to those conditions which have rendered the high altitude treatment of phthisis so famous at Davos and elsewhere. To this question the answer must be in the negative. The influence of rarefaction of the air upon phthisis appears to be slight under 1500 or 2000 feet, and we have no sanatorium at this elevation. Further, our winter presents meteorological conditions the most diametrically opposed to the brilliant sunshine and intense dryness to which the climate of the upper Alps owes no small portion of its efficacy.

DISEASES of the uterine appendages have been brought during the last ten years into great prominence—a prominence which has not yet been shown to be deserved. This state of things has been brought about, not by any careful study of the physiology of the organs involved or of the etiology and pathology of the diseases to which they are subject, but by the frequency with which women have been made the subject of the operation of spaying—in fact, by the clumsy method of "setting the cart before the horse." The great frequency with which the uterine appendages are the seat of disease demanding their removal has often been asserted, but on evidence which has quite failed to carry conviction to the mind of the profession in this country; while the beneficial results of the operation of spaying in such cases, although asserted and reasserted, have not as yet received such evidence in their support as to place the operation in the position in which those who frequently have recourse to it would fain see it. In the June number of the *American Journal of Obstetrics* is published a paper by Dr. HENRY C. COE, pathologist and surgeon to outpatients to the Woman's Hospital, New York, entitled, "Is Disease of the Uterine Appendages as frequent as it has been represented?" Dr. COE, from his official position as pathologist to the Woman's Hospital, has had a good field for observation. His experience, however, is not limited to the cases in that hospital, but many uterine appendages which had been removed on the supposition that they were diseased were sent to him for examination. The results of his investigations, and the conclusions he derives from them, are contained in his paper, and these conclusions we recommend heartily to the profession in this country as well as elsewhere. The ovary in health passes through a series of states which there is no reason to doubt are often described by operators as states of disease. In one stage it is small and ribbon-like; in another it is plump, full, with a smooth surface; in another it presents several vesicles on its surface; in a fourth it is enlarged, congested, œdematous, and swollen; in another, again, it is small, hard, firm, devoid of follicles, its surface fissured and thickened, cirrhotic. All these conditions are natural and healthy, and yet almost all of them have been made reasons for the operation of spaying. Dr. COE says, "Agnosticism in regard to ovarian and tubal pathology is viewed with small favour at the present day. A peculiar feature in the growth (if it really is growth) of abdominal surgery among us is that it owes its impetus to the surgeons rather than to the pathologists.....The gynæcologist will remove the ovaries and tubes, and will afterwards call upon the pathologist to justify the wisdom of the operation, which, to tell the truth, is often extremely difficult to do."

The criteria of disease of the ovary employed by the laparotomist, "who judges entirely by outward appearances," are "a considerable increase (or decrease) in the size of the ovary, thickening of the cortex and stroma, the presence of several cysts on its exterior—these are the common results which are alleged at the operation-table in justification of its removal." Dr. COE discusses these criteria, and shows that all the conditions mentioned are compatible with perfect health of the ovary. "But," adds the author, "of all the reasons urged in justification of oöphorectomy, that of cystic degeneration is the one most frequently heard. Time and again have I seen passed around in societies ovaries on the surface of which were three or four vesicles not larger than small peas, and rarely have I heard this diagnosis of 'cystic degeneration' called in question. ..... Now, without venturing to dwell upon such a disputed point, I would only call attention to the fact that if all these so-called cystic ovaries are to be viewed with suspicion as the forerunners of possible cystomata, there are few women who can be regarded as positively out of danger." This, however, is not all. Cystic degeneration, cirrhosis, &c., of the ovaries are not the only conditions which demand their removal. Dr. COE proceeds: "HEGAR makes the following peculiar assertion, 'There are unquestionably changes within the ovary, invisible, and not at all recognisable clinically, which may however, occasion severe

and protracted symptoms of disease, so that castration may be indicated even when anatomical changes are not demonstrable.' Comment is unnecessary. Such doctrine may be reassuring to the indiscriminate operator, but to the more conservative it will savour not a little of barbarism."

The tubes have recently acquired an importance which they have not hitherto commanded, but this importance is surgical rather than pathological or physiological. It has been long known that the tubes are subject to inflammation and its consequences, closure of their lumen, adhesions of their extremities, &c.; but now their surgical diseases are pyo-salpinx, hydro-salpinx, catarrhal salpingitis, chronic catarrh, commencing pyo-salpinx, hypertrophy, stenosis, congestion, enlargement, dilatation, œdema, &c. It should be remembered "that a healthy tube is capable of a distinct increase in size under the influence of vascular engorgement, that its blood-supply is exceedingly rich, and that its mucous lining is so folded as to present a surface of large extent compared with the size of the tube. As seen during menstruation and at the operating table, the congestion is frequently so extreme that the tubes appear of a deep purple hue. Slight hæmorrhages from the mucous membrane have been noted. When rolled between the fingers, the tubes seem to be, and actually are, larger than they are after removal from the body. If, added to this supposed abnormality, the surgeon discovers a few adhesions attaching the fimbriated end of the tube to its ovary, and some small cysts on the surface of the latter, the indication is clear—it must come out!"

Dr. COE has never found catarrhal salpingitis except in the acute form in women who had died of acute peritonitis, consequent upon the extension of acute purulent endometritis. Atrophy of the muscular coat is less common than would be inferred from statements often made, while hypertrophy is by no means common. Dr. COE states that no small number of uterine appendages are removed in New York, both in hospital and private practice, and a large proportion of them passes through his hands: "I have found that undoubted pyo-salpinx existed in not more than one-fifth of the cases, hydro-salpinx still less frequently, while true hæmato-salpinx I believe to be extremely rare, having never seen but one undoubted example. I am profoundly sceptical regarding any diagnosis of pyo-salpinx in which a collection of pus cannot be demonstrated; you would certainly reject a diagnosis of abscess in which this element was wanting. Yet such diagnoses, acting upon no sound anatomical basis, are being constantly made."

We are heartily glad to see such good pathological work from an American gynæcologist. The mass of American gynæcological work—and it is very large—degenerates into treatment, and treatment of an operative kind, based upon nothing better than ignorance and fancy. The consequence is that operations and instruments are invented, which bear the name of the inventor, are practised or used by the unwary for a brief time, and are then cast away into forgetfulness. This unfortunately is the history of a very great part of American and English gynæcological work. The cart has been put before the horse, and both have come to grief. The paper of Dr. COE is, and will always remain, a valuable contribution to an obscure and much-abused subject; and cannot fail to be in America the beginning of a healthy scientific scepticism with regard to diseases of the uterine appendages and to spaying, which must lead to a more rational and less indiscriminate and fatal operative interference with women who suffer from but trivial diseases.

THE Arris and Gale Lectures delivered at the Royal College of Surgeons this year by Dr. L. C. WOOLDRIDGE dealt with questions of great physiological, pathological, and more general biological importance. We may say at once that the Arris and Gale lecturer endeavours to revolutionise at least two notions generally accepted in physiology. The chief revolution that he is desirous of effecting is the transformation of the liquor sanguinis from the comparative insignificance of a non-vital to the dignity of a vital fluid. His other chief notion is not put forward with such fervour, but is deserving of thoughtful attention. It is concerned with the perennial subject of spontaneous generation. But there is a certain antagonism between these two ideas. If we grant the first, the second loses whatever force it might have had; for if we allow that the blood is a vital fluid, it does not seem necessary to show that "life" may arise from it. To put this a little more perspicaciously: if the plasma of the blood be protoplasm in a state of excessive fluidity, is it at all surprising that it remains the "physical basis of life"? We confess to an intellectual sympathy with the first view of Dr. WOOLDRIDGE—that the blood-plasma has good claims to be considered as genuine protoplasm.

Let us follow the lecturer through the main arguments by which he seeks to establish his proposition. The coagulation of the blood has usually been regarded, since the important work of ALEX. SCHMIDT of Dorpat, as largely dependent on the presence of the white blood-corpuscles; this position is assailed by Dr. WOOLDRIDGE, who apparently shows that coagulation of the plasma of the blood can occur in the complete absence of the white cells of the blood. The coagulation of plasma without the participation of any cellular elements may be most advantageously studied in the form of peptone-plasma obtained by the injection of a solution of peptone into the circulation of a dog. A few minutes after the animal has been bled to death the blood does not clot, and by means of the centrifugal machine plasma can be obtained perfectly free from all formed elements. The injection of the peptone prevents the normal coagulation from taking place. A simple mechanical or chemical stimulus is all that is necessary in order to evoke coagulation in the plasma. Among the means by which the plasma can be made to coagulate are neutralisation with acetic acid or carbonic acid, dilution with water, or even salt solution, filtering through a clay cell or sometimes through filter-paper. This mechanical cause of clotting is very instructive, and may serve to explain the thrombosis that occurs in obstructed vessels, without having resort to the ordinary theory of thrombosis. A globule of mercury that completely blocks a vessel has no blood-clot around it, whilst a globule that imperfectly obstructs the circulation gives rise to a thrombus. ZAHN attributes the clotting under the latter circumstance to the white corpuscles, which are present in insufficient quantity when complete obstruction exists; but in view of the fact that mechanical stimulation of plasma suffices to induce

coagulation in the absence of all formed elements, ZAHN's explanation is open to doubt. The power of the peptone-plasma to spontaneously coagulate is entirely lost if the fluid be cooled down to zero. But a precipitate is formed of peculiar microscopic appearance. It appears in the form of of regular round discs, three or four times smaller than red blood discs. After they have been separated some time they run together, and form small granular heaps. By a process of congregation and melting together, under the influence of a raising of the temperature of the plasma to the temperature of the room, the small discs may attain the size of red blood-corpuscles, and become biconcave in shape. It is these facts that lead Dr. WOOLDRIDGE to suggest the subject of spontaneous generation. The bodies separable from the plasma under the influence of cold are identical with the "blüt-plättchen" of BIZZOZERO. During the coagulation of the plasma a ferment is formed capable of converting solutions of fibrinogen into fibrin. There is some analogy between the case of the pancreas cell and the blood-plasma. Trypsin is formed as the result of the disintegration of the former, and fibrin ferment from the latter. The capability of forming a large amount of trypsin goes hand in hand with the presence of a large amount of "granules" in the inner zone of the pancreas cell, and the capability of forming a large amount of fibrin ferment from blood-plasma depends on the amount of a substance which appears in the form of most definite "granules." Attention is also called to the fact that fibrin ferment appears to be the post-mortem ferment of muscle, thus greatly strengthening the analogy between rigor mortis and the coagulation of the blood. Histologists have distinguished between fluid unformed (paraplasma) and granular-formed protoplasma. The latter is believed to be specially concerned in the functional activity of the cell. Chlorophyll granules are an illustration of the functional activity of "granules." Regarded as protoplasm, blood-plasma has its granular formed protoplasma and its fluid unformed paraplasma, like any other mass of protoplasm. Genetically considered, the blood is derived from the same cord of protoplasm as constitutes the vascular wall. When the blood-plasma leaves the vessel wall, it is the plasma that undergoes alteration, on which coagulation depends, and not on the formed element of the blood, on Dr. WOOLDRIDGE'S view. Again, the analogy with the pancreatic ferment is interesting. Trypsin arises as the result of the death of the pancreatic protoplasm; and just as the fibrin ferment is incapable of attacking living blood-plasma, so pancreatic ferment is incapable of attacking living pancreatic protoplasm and living intestinal protoplasm. Fibrin ferment acts on a special body—fibrinogen; it does not act on plasma, because this contains no fibrinogen. Trypsin acts on proteids; it cannot touch a protoplasmic molecule. The essential chemical process in the coagulation of the blood, according to WOOLDRIDGE, is an interchange between protoplasma and paraplasma, both of which bodies consist of proteid and lecithin. In the process of coagulation there is a lecithin transference, the protoplasma losing, the paraplasmic moiety gaining, lecithin; the result being the formation of fibrin, which is also a proteid-lecithin mixture or compound. Coagulation is, then, not an ordinary fermentation process. But coagulation may be a type of processes occurring everywhere in protoplasm. It may be that the chemical processes of life are of like nature with coagulation, and not of the same order as fermentation. The blood ferment is essentially a post-mortem production, the result of the final explosion of the plasma molecule. The fibrin ferment will not cause coagulation of the plasma. The injection of a large quantity of fibrin ferment into the blood does not cause thrombosis. But the injection of a certain proteid-lecithin compound, not a ferment, will cause the blood to clot from one end of the body to the other, provided that enough of the substance be injected.

If the process of coagulation is rightly regarded as typical of many processes of life, these processes, far from being catalytic, are the result of the union in definite proportions of complex proteid-lecithin compounds. Lecithin and proteid are constantly present wherever there is life. As in the case of the blood, ferments may arise as epiphenomena of the main processes. That lecithin is profoundly concerned in the formation of these ferments is certain, so far as the blood is concerned.

DR. CLOUSTON'S address on "the Relationship of Bodily and Mental Pain," delivered at the opening of the section of Psychology at Brighton, is an able and useful summary of certain of the prominent known facts in connexion with the subject of pain in its leading varieties. It may be doubted whether the author was happy in the title of his paper. To draw a distinction between *bodily* and *mental* pain is to imply that the mind is something apart from the body, which would, of course, involve a fallacy in science. There is in this mode of reasoning the need—which, indeed, Dr. CLOUSTON recognises—of hypotheticating an *ego*, whether for man or earth-worm, when we speak of "feeling" in the sense of sensation, apart from the direct and immediate impression of forms of motion causing changes of structure. The so-called "mental" pain of mind caused by seeing or hearing something painful is, of course, identical with the pain caused by simply thinking of the same something; and the function of cortex activity is absolutely as directly bodily as the function of ordinary nervous activity in any peripheral part of the body. It is, therefore, a misleading policy to think or speak of some forms of pain as "bodily" and of others as "mental." It would be better practically, if not also more accurate, to speak of ideational and sensory pain. Not that pain of an ideational character primarily induced in the cortex, even when subsequently radiated to the periphery and supposed to be located in some distant part, as in what is sometimes called imaginary pains, is not sensory. In truth, ideational pain is as truly sensory as any other form of pain; and the so-called "imaginary" pains of the genuine "hypochondriac" or "hysterical" sufferer are quite as real as the pains excited by cutting or bruising. In short, the nature of pain is not determined or even affected by the accident of its being induced from without or set up within the body; but if we classify those forms of pain which are induced in the cortex as *ideational*, and call those which are, so to say, projected on to the cortex from without *sensory*, we do little violence to the language of science, and we do not indirectly lend countenance to the fallacy of supposing that there must needs be an *ego* to feel, and that to that *ego* is to

be attributed the origination of mental acts, whether of volition or sensation.

Dr. CLOUSTON deals largely with MEYNERT'S hypotheses, and, we think, wisely questions the accuracy of his view that pain is of "vaso-constrictor" origin. It is certainly not true that the arteries are always contracted when pain occurs, even though we may concede to MEYNERT that the stage of constriction upon which he insists may be of very short duration and yet suffice to originate pain. Meanwhile, in spite of many laborious arguments to the contrary, we must adhere to the belief that pain is invariably induced by what may be called mechanical causes. Either there is motor irritation, or pressure, or tension, or stretching, or discordant activity in one or other form. The normal as regards the physical state of the tissues affected is changed, perhaps not at the part to which pain is referred, but at the point where it has been originated. We do not doubt that the cause may be transitory while the effect is persistent, but the essential factor of pain is change in the physical state. Even when pain is induced by ideation or cortex activity, it is by change in the nerve or blood state the effect is produced.

We must confess our inability to understand what Dr. CLOUSTON means by saying, "When MEYNERT claims credit for being the first 'to insist that the processes of innervation from the hemispheres, which constitute what we term volitional acts, are nothing more than the perception or memory of the sensations of innervation,' he states a proposition which conveys no definite meaning to my mind." It seems to us clear enough that MEYNERT is simply claiming to have been the first to propound the now generally accepted doctrine that the brain can originate nothing; that, in fact, it only perceives, collates, compounds, and reflects in forms which are kaleidoscopic in their *newness*, the ideas presented to it. Congenital ideas, so-called are, in so far as they can be said to exist—and we think they must be admitted in a limited degree,—the outcome of trains of work laid by the hereditary conformation; just as though a mechanical apparatus were contrived to perform certain actions, and provided with a coiled spring which being released the contained energy would be liberated in a predetermined direction and with foreseen results. It cannot be denied that something like this occurs in the reproduction of partially educated cells in the progeny of educated parents. Without such a hypothesis, it would be impossible to account for the mutation of species or the improvement of stock, whether animal or vegetable. The law of development necessitates this hypothesis, and it is manifestly a sound one; but beyond this the cerebrum is a *tabula rasa*, and indebted for al inscribed upon it, and apparently originated by it—more correctly, reflected from it,—to the impression of externals. This is all MEYNERT means, and it is what everyone must accept and endorse.

Dr. CLOUSTON'S paper will be studied with very great interest and profit by the multitude of practitioners for its sound and useful information on the relations of neuralgia and melancholia, and for the explanation it offers of the significance, if not also of the cause, of certain forms of cephalalgia which are increasingly common, and which give the medical man much trouble on account of their obscurity, and of the difficulty of treating them successfully.

Annotations.

"Ne quid nimis."

CHOLERA IN SOUTHERN EUROPE.

THERE has, during the week ending Aug. 24th, been a decided falling off in the severity of the outbreak of cholera, both in Italy and in the Austro-Hungarian Empire. From the latter, indeed, no news has been received since the 20th, up to which date 9 more deaths had occurred at Trieste, in addition to 4 fatal attacks in a village in Carniola. In Italy the newly attacked places are only two in number—namely, Cerignola, not far from Barletta, and San Marco in Lamis, also in Southern Italy. At Barletta itself the disease is still severe, but the daily number of attacks has fallen during the week from some 40 to about 12, and the deaths from over 20 to about 6. In North-eastern Italy the number of towns and provinces from which information comes has been materially diminished, but the disease is still maintained without any break in Vicenza, Ravenna, Padua, and Verona. There is, however, a doubt whether some of the returns have reference to the provinces or the towns affected. Under any circumstances, it is a matter of congratulation to see the month of August passing by without any material increase in the epidemic. Too much importance must not, it is true, be attached to this, for some of the most severe occurrences of cholera have taken place in Europe during September, and even the later autumn months. Besides which, cholera often exhibits a tendency to decrease before some sudden increase in the area and intensity of its diffusion. But, after all, the history of the outbreak this year is, so far, rather in favour of a cessation of the epidemic of 1884-86 than of its continuance.

DEFECTS OF VISION IN CANDIDATES FOR THE PUBLIC SERVICES.

AMONG the difficulties which have arisen in connexion with the system of competitive examination for admission into almost every branch of the public service, an important one has been to decide the amount of defective vision which ought to be considered a sufficient ground of disqualification. We are not aware of the existence of any specific instructions on the subject, except as regards recruits for the army. In the case of candidates for commissions, medical officers were instructed not to reject them on account of short sight, but to report the defect, stating whether it was remediable by the use of glasses, and leaving the final decision with regard to fitness to the military authorities. There was an exception made to this in 1871, in the case of candidates for admission into the Royal Military Academy at Woolwich, who were required to "possess a range of vision which will enable them to see clearly the 2′ square bull's-eye at 900 yards." The want of definite rules has been in many cases a cause of great hardship, where young men have gone through a course of instruction and have been pronounced unfit on presenting themselves for admission to the examination. Sir J. Fayrer, in his capacity as President of the Medical Board at the India Office, has done very good service in preparing "Rules regarding defects of vision which disqualify candidates for admission into the various departments of the Indian Service." These have been published under the sanction of the Secretary of State for India, with an appendix containing the information given in Sir T. Longmore's Optical Manual as to the range of vision necessary to qualify a candidate for admission into the Royal Navy, British Army, and Civil Service. We trust the authorities of the Army, Navy, and Civil Service will follow the example thus set them, and publish an authorised code of instructions for the guidance of the examining medical officers, and

for the information of parents and tutors of intending candidates. In the meantime these cannot do better than procure Sir J. Fayrer's little work, and be guided by the clear instructions which it contains regarding visual defects and the mode of testing them.

MEDICAL FEES.

WRITING on this subject in the columns of the *St. James's Gazette*, "F.R.C.S." arrives at the conclusion that, looking at the fees obtainable for consultation at great distances from home, "nothing was ever so lucrative as the railway journeys of the present day." The process by which this result is reached is the following, in the correspondent's own words: "What was the state of things formerly, which I recollect? Between 11 and 12 o'clock in the morning you received a letter (unpaid) from Brighton calling you to see a patient. If you went directly upon receipt of the letter, you sacrificed a whole day's fees in London, and had to spend twelve hours at least in a post-chaise before you got home. The fee was fifty guineas. The expenses of the journey: posting £5 (if four horses, £10), with the loss and tear consequent upon 100 miles of post-chaise travelling; expenses at Brighton, £2; loss of one day's patients, £21 10*s.*; total, £28 10*s.*—leaving a balance of £24. Now a practitioner receives at 8 o'clock a paid telegram asking for his attendance; he sees all his day's patients, leaves London at 5 o'clock, sees his patient at 6.30, and, if he likes to return home the same day, is back by 10.30. Should he sleep at Brighton, he is at home in time in the morning to see all his patients for the day, at a cost of, travelling and expenses at Brighton, £1 10*s.* The fee is now £31 10*s.*, leaving a gain of £30, with only a total of railway journeys of two hours and a half, with no loss of patients." "F.R.C.S." can have very little practice at home, or he must have been very much worried with long journeys in the past, and therefore feels the present state of matters to be comparatively a subject for complacency. Has he, however, forgotten the great difference which exists between the condition of things years ago and now? At the time of which he speaks everything went slower than it does now. The £24 balance left, after calculating expenses and loss, had a purchasing power quite equal to, if not in excess of, the £30 gained now; and even if the £21 10*s.* for patients be saved to the practitioner, the net value of his receipts on the average day's work is not so great as it used to be. Consultations at long distances occur much less frequently than in olden times, and they more seriously derange the routine business of the consultee. In short, for one fortune made in practice in the present day, there were probably three gained in the days to which the recollections of "F.R.C.S." carry him back.

THE VIRUS OF GLANDERS.

A VALUABLE communication has been made by M. Chauveau to the Académie des Sciences on the resistance of the virus of glanders to the destructive agency of atmospheric air and heat, the investigations having been carried out by M. Cadéac and Malet. The authors endeavoured at first to discover the conditions that preserve and those that destroy the virus under ordinary circumstances. They have ascertained how long the virulence persists (1) in the humours dried more or less rapidly, and in the diseased lung left to the action of the atmosphere at different seasons of the year; (2) in humours placed in an atmosphere saturated with moisture at the ordinary temperature of the atmosphere; (3) in humours diffused through water. The resistance of the virus to desiccation varies with the rate of desiccation, with the temperature of the medium, and with its humidity. In the laboratory it was found that the virulence lasts two days, no matter what the season of the year, if the virus be exposed in thin layers in watch-glasses. In the external atmosphere, however, the virulence may be harmless on the third day or persist till the ninth; the former happens mostly in the summer or end of spring; the latter in the month of December. Meteorological observations show that a high temperature prevails and a dry state of the atmosphere in the former case, whereas in the latter the temperature is low and the air moist. Thorough desiccation of the virus means its destruction; the active virus always retains some of its moisture. If the virus be desiccated rapidly, as in a stove, at a temperature of 40°C., from one to twenty-four hours, its virulence lasts for a longer period than when desiccation takes place more slowly. Thus, a virus dried in the stove for two hours retained its activity for six days. It seems probable that this difference in the duration of the activity of the virus, when slowly and rapidly dried, is to be attributed to the more prolonged exposure to the atmospheric oxygen, rather than to any difference in the state of moisture of the environment. Fragments of farcy buds from the lungs retain virulence in the central parts as long as twenty-four days, whilst the more external layers lose theirs at rates dependent on the facility with which they become desiccated in the atmosphere. An atmosphere saturated with moisture and at ordinary temperatures preserves the virulence of the morbid humours for very long periods of time—fifteen to thirty days. Boiling the virus for two minutes in water suffices to destroy its activity, but simply pouring boiling water on the morbid material does not destroy its virulence.

DR. WENDELL HOLMES.

DR. HOLMES has unfortunately left us long before we have had such opportunities as we could have wished of expressing our welcome to him. At the last moment, as the guest of the Liverpool Philomathic Society, he spoke kindly words of affection and respect for "dear, dear England," which will be felt and appreciated everywhere. But, though gone, he is still with us as one of our most "autocratic" companions, teaching us great broad lessons of sympathy with all that is human and divine. His medical distinction may be somewhat lost in his literary fame, but we claim him, nevertheless, as one of the men whose vision has been refined and intensified by the study of medicine, and who could not have drawn some of his most effective pictures of character and experience without this study. Who but a medical man could have done justice to "the little gentleman" with his diminutive and deformed body and his disproportionate thoughts, or who else could so eloquently have vindicated the true gentleness and kindness that underlie the apparent sternness and want of feeling of the surgeon. We trust he has received a fresh stock of health, and that in the atmosphere and association of the old country, which he loves like a true American, he has found a source of fresh inspiration, the expression of which will delight the "breakfast-table" for generations yet to come.

THE TREATMENT OF TYPHOID FEVER.

THE hope of cutting short the usual course of the specific fevers still lingers in the mind of practical physicians, though it must be confessed that there does not appear to be much encouragement in store. M. Pecholier of Montpellier is of opinion that he has discovered the means of causing the premature termination of ordinary cases of typhoid fever. The agent is the familiar quinine, administered in daily doses of not less than one gramme, and this from the very first days of the illness. The drug may be aided by the employment of tepid baths if there be considerable fever, and by small doses of digitalis should the heart be specially disordered.

A CONTRIBUTION TO THE KNOWLEDGE OF THE ACTION OF URETHAN.

DR. E. BRAUN, being a sufferer from insomnia caused by heart-disease, tried the action of urethan, and contributes his experience of this drug to the *Eira*. The first evening he took a dose of two grammes, hoping confidently to fall asleep in "from ten to thirty-five minutes." In this hope he was disappointed, as, instead of sleeping, he lay in a peculiar sort of trance, conscious of all that went on round him, hearing the striking of the clocks both at the hours and half-hours, and the voices of people in the street. The following evening he again took two grammes at 11 o'clock, and, as sleep did not follow, he took another gramme in an hour's time; the same peculiar condition occurred. The third evening Dr. Braun took three grammes at a time, but without any other result. He now gave up the experiment, as he was aware that large doses were not considered advisable. About a day or half a day later he suffered from difficulty and pain in passing urine, and found on examination that there were traces of albumen. Some hours later he had fever and a severe headache. The symptoms all vanished after forty-eight hours, with the exception of the difficulty in passing urine, which lasted for several days. Dr. Braun judges, from his own experience, that immunity from after-effects with urethan is not so certain as has been stated.

FOR AND AGAINST ALCOHOL.

THE total abstinence section of the British Medical Association never fail to testify at the annual meeting. About 160 members of the Association were present at the breakfast at Brighton given by the National Temperance League. We need not say that the speakers at this meeting were not of the opinion of a recent writer in the *Revue Scientifique*—M. Fournier de Flaix. M. de Flaix maintains that the outcry against alcohol is utterly unmerited, and that all vital statistics are more favourable in nations in proportion to the use of alcohol. In France, he says, the birth-rate is lower and the death-rate higher, where the consumption of alcohol is smaller. In England, again, more alcohol is consumed than in France, and yet in France the birth-rate, the death-rate, and the statistics of crime and suicide are less favourable than in England. Comparing other nations, he reaches the same conclusions, and maintains that alcohol is an alimentary element whose consumption should depend directly on climate. Very different were the teachings of the medical abstainers at Brighton—viz., Dr. Norman Kerr, Dr. Nathan S. Davis, Professor Geikie of Toronto Medical College, Dr. Simon Fitch of Nova Scotia, Dr. Bernard O'Connor, and Dr. Ridge, Secretary to the Medical Temperance Association. Dr. O'Connor said that during his fourteen years of practice he had never prescribed alcohol for any patient. Speaking as a physician to a consumption hospital, he maintained that phthisical patients did much better without alcohol—the night perspirations and the cough were less, and the morning exhaustion was less. But the principal speaker, of course, was Dr. Nathan S. Davis—the President-elect of the approaching International Congress. Dr. Davis's disparagement and denunciation of alcohol were absolute and unconditional. It does not nourish, it does not sustain heat, it does not assist convalescence, it does not improve the pulse in fever, and it is of no virtue in nursing. It is purely evil in its effects. So far from strengthening the heart's action, it depresses it—it paralyses it. In saying so, he relied not only on his own observations, but on those of Anstie and Parkes. He maintains that alcohol is simply anæsthetic; that it does not remove evils, but makes one insensible to them; and that it arrests and retards all healthy action of the tissues, and tends to the retention and accumulation of effete materials. It is a pity that M. Fournier de Flaix and Dr. Davis did not meet at the Brighton breakfast. There is perhaps a little extremeness on either side, but of the two sides we decidedly lean to that of Dr. Davis. We entirely agree with him and other speakers in thinking that the medical prescription of alcohol should be undertaken only on the strictest grounds. M. de Flaix must remember that France now is not far, if at all, behind England in the consumption of alcohol, and that, besides, she indulges in absinthe, and he will have to explain the fact that in the temperance section of life insurance offices in England the value of life is apparently much greater than in the ordinary section, so much so that in some offices teetotal lives are taken for less premiums or receive larger bonuses. When we read the indictment of Dr. Davis against alcohol, we are tempted to ask if it is the whole truth—if alcohol has no redeeming quality. Admitting that it does infinite harm, does it do no good?—does it prevent no evil? Can the able physicians who recognise its virtues be all mistaken? The question is one for scientific and thoughtful men to discuss gravely, and medicine will not be without much authority and, let us repeat, responsibility, in its settlement.

A MINISTRY OF HEALTH.

WE have repeatedly contended that there ought to be a Department of Health in the Government of this country, and that a Minister of Health should have a seat in the Cabinet. Public Medicine is preventive, and as such it can only be effective when it forms an integral part of State policy. Surely health is not secondary to wealth; and if trade needs to be specially controlled in the interests of the State, health-promotion has a not less urgent claim to be considered a constituent part of policy. We are glad to see that the question has been reopened, and is being agitated by Mr. Hamer, a practical worker in the field of health-promotion. There are urgent matters of sanitary enterprise which call loudly for help from the Government, and which it is not only inexpedient, but a cause of weakness, to neglect. The Prime Minister who shall perceive the need and take measures to satisfy it will deserve well of his generation and serve his country.

COCAINE IN GYNÆCOLOGICAL PRACTICE.

PROFESSOR AMANN gives in the *Münchener Med. Wochenschrift* of July 20th an account of the experience he has had with cocaine in gynæcological practice during a period of about a year. He employed solutions of the hydrochlorate varying from 5 to 10 per cent. Of the strongest of these he has sometimes used altogether two grammes (one drachm), and in one case nearly double that quantity, in applications to the mucous membrane made by means of a brush every five or six minutes. In cases of hyperæsthesia and inflammation of the vulvar and vaginal mucous membrane, rendering coitus very difficult and making the passage of a small cylindrical speculum extremely painful, the condition was greatly relieved by the application of a 5 per cent. solution every day for two or three weeks. Dr. Amann tried in two cases painting the vulva with a 10 per cent. solution, in the hope of being able to remove small warts painlessly, but the attempt proved almost useless. In pruritus of the vagina, a 5 per cent. solution applied for several days by means of cotton-wool gave no permanent relief, though Hoffmann obtained good results in these cases from a 3 per cent. cocaine and vaseline solution. Urethritis, with considerable swelling of the mucous membrane, with dysuria and painful micturition, was usually greatly relieved by painting the meatus with a 10 per cent. solution every second day, which diminished the hyperæmia and the tumefaction of the part. Blumenfeld also speaks

of good results obtained by the use of a 2 per cent. solution for the purpose of facilitating the introduction of a catheter. In cases of erosion of the cervix, and cervical endometritis with contraction of the internal os, occasioning severe dysmenorrhœa, four to six applications of a 5 or 6 per cent. solution (exceptionally of a 10 per cent. one) by means of a sponge-holder or a Braun's intra-uterine syringe, with, if necessary, preliminary dilatation of the cervix, always effected a cure. In these cases, as well as in urethritis, the action of cocaine is of a vaso-contractile character. In order to show what powerful effects of this nature can be caused by cocaine, the writer goes on to give an account of an interesting case of long-neglected inversion of the uterus, the metrorrhagia, of which the patient had several attacks, at last yielding to the local application of a 10 per cent. solution. The quantity used here, however, was considerable, and the patient exhibited rather serious toxic symptoms.

THE TREATMENT OF PARONYCHIA.

DR. SELLDEN writes in the *Eira* that he has for years made a special study of this subject. The greater number of his patients have been miners, smiths, machine labourers, servants, and others whose fingers are exposed to injury. The disease commences in the subcutaneous tissue, and spreads to the periosteum. There are differences of opinion as to the varieties of this disease, some authors asserting that there are four, others that there are only two—the deep and superficial inflammation. Dr. Sellden, after a series of trials, found the following method most efficacious in the treatment of paronychia. When the patient will consent to an incision, the finger, after it has been opened, is instantly plunged in a tumblerful of hot water, which is then allowed to cool till it is nearly lukewarm. Half a teaspoonful of arnica is poured in, and a teaspoonful of the usual 10 per cent. solution of potash is added. This mixture is highly anæsthetic; the finger is held in it for from fifteen to thirty minutes, when the "bad matter" comes out. This expression is very characteristic of the phenomenon. The blood and pus exude in a thin stream about the size of a knitting needle, which forms circles in the alkaline liquid, and finally settles in a thick mass at the bottom of the glass. Fifteen minutes or half an hour after the finger is dried it is rubbed with vaseline ointment containing 10 per cent. of sulphide of potassium. The finger is then immediately enveloped in a poultice which continues warm till the next finger-bath, and thus hastens the cure. These finger-baths are taken from two to four times daily, and the wound is covered during the earlier days with sulphur ointment, and later with a boracic ointment. The finger is then bound up with a wadding compress and a bandage. Carbolic acid may be used in the finger-bath, but Dr. Sellden gives the preference to arnica, which he finds particularly useful in all sorts of injuries.

FEES FOR CERTIFYING LUNATICS.

THE Holborn Union Guardians are of opinion that a fee of two guineas is too high for the examination and certification of a lunatic. Would any member of that board contentedly place himself in a position of liability to action for false procedure at a less cost? Until the law affords due protection to medical practitioners in the discharge of their public duties, the authorities which require their service must be made to understand that it is necessary to pay for them. It is simply monstrous to expect any properly qualified medical man to devote the requisite time and attention to the study of a case of alleged lunacy, and to assume the responsibility of certifying, at a lower rate of fee than that charged. We are glad to see that the magistrates upheld the reasonable demand made.

ETIOLOGY OF GONORRHŒAL ARTHRITIS.

DR. SMIRNOFF, writing in the *Vrach* on the etiology of gonorrhœal arthritis, remarks that inflammation of the joints occurring after an attack of gonorrhœa has for a long time been looked upon as an outcome of some sort from the urethral disease, but although the genetic relation of the latter to the joint disease was generally allowed, the mode in which the metastasis takes place still remained in obscurity. It was said that the poison, which was probably of a chemical nature, found its way into the blood, and was thus distributed through the body, and so set up the joint inflammation. Since Neisser succeeded in finding gonorrhœal micro-organisms the cause of the arthritis ought to be more satisfactorily ascertained. Indeed, Petrone, Kemmerer and Prof. Afanasieff have actually demonstrated the presence of gonococci in the exudation of the joints in gonorrhœal arthritis. Taking into consideration, however, the fact that the significance of Neisser's gonococci in the etiology of gonorrhœa is not universally accepted, it cannot be considered that the arthritic inflammation is satisfactorily accounted for. An observation made by the author for the better elucidation of this matter in the Kazan Pathological Institute on the contents of a knee-joint affected with gonorrhœal arthritis is therefore of considerable interest. The case was that of a man of twenty-eight, in whom gonorrhœa showed itself on Jan. 1st, 1886. On the 5th orchitis supervened in consequence of too active exercise and on Feb. 1st the right knee became inflamed. After about a fortnight Professor Studenski drew off the fluid and washed out the joint. The quantity was about three ounces, and it was of a sero-purulent character. Thin films of it were placed on cover glasses, dried and stained with methylene blue (1 part to 33 of alcohol and 66 of water), remaining in the solution about a minute, and subsequently washed with water and re-dried. The examination was conducted by means of a Zeiss's oil immersion $\frac{1}{12}$ objective. Quantities of gonococci were seen in the preparations mingled with pus-corpuscles. Dr. Smirnoff is therefore able to confirm the previous observation of Petrone, Kemmerer, and Afanasieff as to the microbic origin of gonorrhœal arthritis.

INOCULATION OF TUBERCLE IN MAN.

SINCE the numerous facts which had been gleaned in former times on the subject of tubercle have been explained, and as it were arranged by the discovery of the bacillus, the question of the inoculability of tubercle is at once capable of comprehension and answer. The opinion that tubercle is capable of inoculation was held by many ancient writers, and Laennec himself, after a prick from a saw while performing a necropsy on a phthisical subject, thought that he witnessed an example of inoculation in a small tubercle in the skin; but twenty years afterwards the great clinician was in good health, though finally he died of phthisis. Cutaneous inoculation has been made experimentally in monkeys with perfect success, but at present facts are wanting to show that this can occur in man, however probable it may seem. In the *Archives de Physiologie* for July, Dr. Hanot, physician to the Hôpital Tenon at Paris, has collected six observations bearing on this point, which tend to show that such inoculation does take place, one case having fallen under his own observation, and the others being gleaned from recent medical literature. From these observations it would appear that tubercular matter inoculated into the skin forms at first a small papule from which a caseous kind of pus is discharged, and that this papule increases in size and extent, breaking down at the same time, so that finally an irregular ulcer is formed, which has no tendency to heal under the usual lines of treatment, and which slowly extends, so that after one or two years the

ulcer has reached a considerable size. The sides of the ulcer are formed of embryonic tissue, with giant cells containing bacilli, and sometimes the lymphatic glands are involved, sometimes not. Whether pulmonary tubercle follows the cutaneous inoculation is difficult to say. In the particular case observed by Dr. Hanot, the patient was in the third stage of phthisis, and died soon after with a tubercular ulcer on the arm of at least two years' standing; while the history of cough only dated from the last ten months, which looks very much as if the skin lesion preceded the pulmonary, and was the cause of the phthisis. The sources of inoculation were necropsies on tubercular subjects, nursing phthisical patients, handling old bones, pricking the hand with a fragment of porcelain from the broken spittoon of a phthisical patient, and in four of the cases the tubercular character of the skin lesion was verified by finding the bacilli. The subject has considerable importance, for in presence of a skin lesion of this description, the medical man must not remain inactive, for at any time there is a chance of the bacillus generalising itself and producing its fatal results in internal organs, so that complete eradication is undoubtedly the treatment called for, and eradication in such a way that the chances of aiding the migration of the microbe are minimised, which indication is best carried out by the actual cautery or Paquelin's knife.

THE CHOLERA COMMISSION.

WE understand that Messrs. Rouse and Sherrington, who, it will be remembered, were commissioned by the Royal Society to visit Italy and report on the outbreak of cholera in that country, have come to the conclusion that there are no cases of cholera in Northern Italy or in the Po valley, although the newspapers daily announce cases of the disease. The so-called cholera hospitals at Alessandria, Verona, Vicenza, and Padova have been visited, and the municipal authorities consulted, but no cases have been discovered. The laboratory with which the commission was provided has therefore proved useless. In the south of Italy, where it is impossible to work the laboratory, there are, however, cases of true cholera, but in the infected districts there is no gas or water-supply, and no hospital. The work of the commission has consequently come to an end, and we understand that a speedy return to England is contemplated.

EFFECTS OF SYPHILIS IN PREGNANCY.

DR. LOUIS HIRIGOYEN, who has published a series of articles in the *Journal de Médecine de Bordeaux* embodying the results of observations on the effect of syphilis upon the course of pregnancy, states that in the Bordeaux Maternity Charity, in which five-sixths of the cases are those of unmarried women, the syphilitic are 5 per cent. of the whole number. The author's observations go to confirm Fournier's dictum that "a syphilitic woman becoming pregnant is more likely to abort than a pregnant woman who becomes syphilitic." For example: Of eight women who had been syphilitic for more than a year, five aborted, one bore a child which died on the eighth day, and two bore living but puny children. Of nine women who contracted syphilis within the first two months, six aborted at six months and three at seven months, all of macerated children. Of three women who contracted syphilis during the third month of pregnancy, one miscarried at seven months of a macerated child, and two of a similar child at eight and eight months and a half respectively. So that in all the twelve cases where syphilis was contracted before the commencement of the fourth month miscarriage of a dead fœtus resulted, even in some cases in which anti-syphilitic treatment was diligently pursued, the only apparent effect produced being the retardation of the period of miscarriage. Syphilis occurring after the commencement of the fourth month proved less fatal, for of four cases which took place from the fourth to the sixth month, one brought forth a healthy child at eight months; the second, who was treated medicinally, went her full time, and was delivered of a healthy child; while the other two women were confined at seven and eight months respectively of puny children, which died shortly after birth. Where the infection was delayed till after the beginning of the seventh month it proved still less fatal to the children. Thus, of seven cases of this kind four terminated in the delivery of apparently healthy children, and one more might have been born alive but for maternal dystocia. The bodies of the macerated children, as well as those which died after birth, were examined, and no definite syphilitic appearances could be discovered in the osseous or other parts. Of course, treatment was adopted where the woman was seen early enough, and in all cases stringent isolation and antiseptic precautions were enforced, with the result of the avoidance of all serious accidents.

INSTRUCTION IN SCHOOLS FOR STAMMERERS.

FROM time to time we have had occasion to refer to the oral education of deaf-mutes, and we are pleased to note that this form of teaching has now become fairly established as a part of the School Board system. There is, however, yet another class of persons troubled with defective speech, though less gravely afflicted, who may claim a similar consideration. These are stammerers. Treatment and cure in their case do not call for such elaborate care as in the case of mutes. They have not lost a sense, nor is that faculty which in them is deficient—the power of co-ordinating the movements necessary for clear enunciation—entirely absent. It is rather in the condition of rusty machinery; it will work, but not smoothly. There is much hope, therefore, of a good result by training such persons. History and common experience alike bear witness that stammering is curable, and the result of an organised attempt to remedy this impediment in the school children of Brunswick has proved, it is said, that it can usually be treated at an early age with complete success. A point worth noting is that, in consequence of the comparative commonness of this fault of speech, it should not be so difficult as in the case of mutes to form within a given area classes of sufficient size to justify their separate instruction.

"A LOCUM TENENS REQUIRED—UNQUALIFIED."

IT is inevitable, and even proper, that a medical man at least once a year should leave his patients. But he ought certainly to leave them in the care of a duly qualified *locum tenens*. A correspondence has arisen in the *Sheffield Daily Telegraph* on the significance of the following advertisement, taken from the columns of our contemporary: "*Medical.*—Locum Tenens required, unqualified; out-door. Good testimonials essential. Address Medicus, *Telegraph* Office." A correspondent professes some alarm lest such an advertisement should represent a common practice, and he is followed by others who think Sheffield exceptionally given over to unqualified assistants acting under the protection of the name of a qualified practitioner. We think we may assure our readers that such a practice is not common anywhere. The writers are only too accurate in saying that if unlicensed curates or solicitors were engaged to take the place of absent members of the other professions great scandal would result, and the clerical and legal authorities would be soon brought into action, whereas the medical authorities look on such irregularities with comparative indifference. But medical men generally are too much alive to the responsibilities of practice, and, we may add, to their own interests, to leave their patients in other than "qualified" hands. Unless the correspondents of our contemporary are much in error, the

employment of unqualified assistants in Sheffield is carried to a great extent. They are said to be put in charge of so-called "dispensaries" and of branch practices on a large scale. We should be glad to receive some contradiction of this statement.

THE EPIDEMIC OF DIPHTHERIA IN SOUTH LONDON.

AT the present time there is an unusual amount of diphtheria in districts south of the Thames. At Guy's and St. Thomas's there have been many cases admitted, especially at the former, where some of the cases have been of a very severe type. Three nurses at the former hospital have contracted the disease, and unfortunately in one case, that of Miss Blomfield, a lady pupil, the disease proved fatal. She had not entered upon the nursing duties for more than a fortnight when she commenced attendance on a patient suffering from the disease. Twenty-four hours after she had taken charge of this patient she developed diphtheria of a most malignant type, and, we regret to say, died within twenty-four hours afterwards. The nurse in attendance on her also developed the disease, but it was of much milder character and she recovered. It is difficult to account for the greater severity of the type in the fatal case; possibly the nurse had not become acclimatised to the air of a large hospital, for it is the experience of many that those much engaged in ward work are especially prone to suffer at first from those affections which attack the throat.

THE MICROBE OF CHOLERA.

THE account of his research upon the Relation of Cholera to Schizomycete Organs, by Surgeon-Major D. D. Cunningham ("Scientific Memoirs of the Medical Officers of the Army of India," Part I., Calcutta, 1885), bears out in many respects the truth of Koch's discovery. The inquiry was limited to the following points:—(1) The association of curved schizomycetes with materials of choleraic nature; (2) the presence of similar bodies in other media; (3) the effect of variations in the nature of the medium in which they are developed in the curved schizomycetes occurring in association with choleraic materials. These organisms—comma bacilli—were found by Dr. Cunningham in twenty-six out of twenty-eight cases in which the alvine evacuations were examined; they were variable in number and character. In five cases the intestinal contents were examined after death, and in all these organisms were discovered. In not one of eight cases in which the blood was examined were the bacilli found in that fluid. Cultivations in agar-agar were made from these several sources. Characteristic colonies of comma bacilli were thus produced from thirteen out of eighteen specimens of the alvine evacuations, from three out of four specimens of the intestinal contents, but in no case from the blood. Dr. Cunningham remarks truly that the failure to detect the "commas" in the cultivations (which were made under adverse conditions) does not absolutely prove their absence in the specimen employed; and believing as he does in the polymorphism of these organisms, he finds here an additional explanation of the disappearance of characteristic forms. It is an interesting fact that in a case in which the evacuation contained comma-shaped organisms, but where cultivation failed to produce colonies, the diagnosis was found to be mistaken, the case proving to be a malarial and not a choleraic one. His results are summed up in the statement that the belief in the presence of easily cultivated comma-shaped organisms in the dejecta and intestinal contents of choleraic cases is well founded. On the second line of inquiry several specimens of normal alvine evacuations were examined, and in all "commas" were found, but in no instance did the cultivations yield commas,—the conclusion being either that bodies of the nature of choleraic commas are entirely absent from normal alvine evacuations, whether in actual or potential condition; or, if present, they are incapable of further development under conditions favourable to those of the choleraic organism. Dr. Cunningham also found, on examining specimens of tank water, an abundance of comma-organisms, mostly associated with and attached to the scum of Euglenæ that covered the water. His researches on this point were, however, interrupted, but in two instances he obtained characteristic cultivations. Lastly, he has studied somewhat exhaustively the changes in form which these organisms undergo in cultivation—a line of inquiry which has not hitherto been fully pursued.

THE MANUFACTURE OF QUININE BY SYNTHESIS.

A REMARKABLE discovery, by which the price of quinine may be reduced to something like 3*d.* per ounce, has been made by Mr. Cresswell Hewett. The synthetical manufacture of quinine was first suggested to Mr. Hewett in 1869 by the late Dr. Mattheson, of St. Bartholomew's Hospital, whilst giving his assistance in a course of experiments in connexion with apomorphia. Subsequently, Professor Parkes of Netley aided with his advice, and to these gentlemen, rather than to himself, Mr. Cresswell Hewett modestly explains that the process is due. The importance of this discovery is rendered greater by the fact that, while hitherto we have been depending for our quinine on the cultivation of the cinchona tree, from whose bark only about 2 per cent. of good quinine can be extracted, 98 per cent. being valueless, the drug can now be manufactured without limit by a very simple process from an article which can always be got in abundance in any part of the world. Mr. Hewett, we believe, intends to put himself in communication with the Government, who annually spend in India alone about £60,000 in the cultivation of the cinchona tree.

PUBLIC HEALTH IN SOUTH AUSTRALIA.

ACCORDING to the twelfth report of the Central Board of Health of South Australia, nearly all the local boards of health exercising jurisdiction over populous towns or districts have now attached to them medical officers of health, and a large number of townships have been personally inspected by the Board's own inspector. Amongst the more recent advances in the colony are regulations of the nature of bye-laws controlling such matters as the construction and management of cesspools, earth-closets, &c. In one respect the regulations as to the latter are in advance of anything in this country. With us, a local authority can control the construction of an earth-closet, but it can only deal with its faulty management by the cumbrous process of proving it to constitute a nuisance. In South Australia, on the contrary, the mere fact of an earth-closet not being kept constantly supplied with dry earth &c. constitutes of itself a nuisance under the Public Health Act of 1876.

RENAL TUBERCULOSIS.

M. RAYMOND DURAND FARDEL has studied the histology of renal tuberculosis, particularly with reference to the presence of the bacillus ("Contribution à l'Etude de la Tuberculose du Rein," Paris, G. Masson, 1886). The scope of his monograph is restricted to the lesions of miliary tuberculosis. It is therefore mainly of pathological interest, and it could be wished that his studies had been extended to the far more important (clinically at least) affection known under various designations as renal phthisis, scrofulous kidney, strumous pyelitis, &c. There is decidedly room for a good monograph upon this latter affection. However, so far as it goes, the *brochure* of Durand Fardel is of

importance. He has demonstrated bacilli in acute miliary tuberculosis of the kidney, within bloodvessels, glomeruli, tubules, and in the interstitial tissue, and has detected them within the glomeruli and vessels even before the appearance of the anatomical lesions of tubercle—a remarkable fact worth verification. In the early stages the bacilli are to be found preferably on the surface of the glomerular tufts, but in more advanced stages they occur in the tubercular infiltration around the glomeruli, as well as within these bodies. The presence of bacilli in the afferent arterioles is held to demonstrate the generalisation of tubercular infection by the blood stream. The paper has, therefore, a bearing upon the general subject of tuberculosis

VENOMOUS SNAKES.

A BOY, aged fourteen, was admitted into St. Thomas's Hospital on Aug. 18th, suffering from the bite of a snake. It appears that he had gone to Sandown Park for the day, and whilst playing about on a bank he saw a snake moving in the grass. He seized it by the tail, thinking it to be one of the harmless kind found in many parts of the country, and the snake turned immediately and bit him on the right thumb. When the boy arrived at the hospital, seven hours later, there was no mark on the thumb to indicate the exact position of the puncture, but he pointed out a place on the dorsum just above the nail where he stated that he had been bitten. There was considerable swelling of the forearm and inner side of the arm, with swelling and much tenderness of the axillary glands. He was suffering from shock and was somewhat blanched; pulse 80, quick, and rather small. The next day there was more swelling of the arm and axillary glands, but no rise of temperature. He has since progressed favourably, though there is still some swelling of both arm and glands. It would be advisable that boys on visiting places where such snakes are known to exist should be warned of the danger of handling them, or, as in the Australian Board Schools, instructed in the difference between the harmless and venomous kinds.

INOCULATION OF HYDROPHOBIA.

WITH the virus taken from the spinal cord of a dog, which had died of hydrophobia in the Stockholm Veterinary Institute, three dogs were inoculated by Pasteur's method. To render it more certain, the meninges were chosen for the seat of operation. The dogs were carefully selected as being totally free from bites by other dogs which might have been suffering from rabies. The inoculation wounds healed after two days, and the dogs seemed quite healthy and lively. The sixteenth day after the operation two of them showed symptoms of rabies, and the third followed two days later. The first two dogs had fully developed rabies sixty days after the first symptoms had appeared. To save the third dog unnecessary suffering he was killed as soon as he developed decided symptoms of rabies.

BLOOD ENEMATA.

DR. GUTIERREZ gives an account in *El Dictamen* of a case where blood enemata proved of great service. The patient was a badly nourished woman, on whom the author had performed Hegar's operation of excision of the cervix uteri on account of hypertrophy. On the twelfth day a rigor occurred, which was followed by catarrhal pneumonia. The treatment employed relieved the pulmonary symptoms, but evening fever, partial sweats, anorexia, extreme prostration, and a highly anæmic condition persisted in spite of the employment of cod-liver oil, hypophosphites, and other remedies ordinarily prescribed. After a month had elapsed, without any amelioration of the patient's condition, Dr. Gutierrez determined to give enemata of blood. In three days after these were commenced the patient began to regain her colour, and the night temperature diminished. In a week she was able to take and enjoy her food, and to answer questions put to her. After the blood of eighteen lambs had been used, the cough had entirely disappeared; there was no fever, and the patient was able to get up and walk about; her colour had quite returned, and her spirits had regained their elasticity.

CHYLOUS ASCITES.

THE existence of cases of chylous ascites has been called in question by many observers. Some have asserted that all reported cases of this condition were merely of an inflammatory or cancerous nature, in which the products of the morbid processes had undergone intense fatty degeneration. M. Guinochet, of the Hôpital Tenon, has endeavoured to set this question at rest, and apparently satisfactorily. A patient suffering from a peritoneal effusion, believed to be largely reinforced by the escape of normal chyle into the serous sac was experimented upon in the following fashion: Two punctures were made, partly to relieve the tension and also to ascertain the chemical composition of the ascitic fluid. Thus the chemistry of the fluid was determined whilst the patient existed on ordinary diet. Before ascertaining whether any modification of the diet would be followed by a corresponding change in the chemistry of the ascitic fluid, the patient was placed upon milk alone, in which as much butter was emulsionised as the patient could tolerate. If the peritoneal effusion were really derived from the lymphatics, the fluid withdrawn after the administration of a diet so rich in fats as that mentioned should exhibit corresponding changes, not only in an actual increase of the fat, but also in the presence of butyrine—an article which does not occur normally in ordinary human fat, but which would be present in the chyle if butter were an article of consumption. The analysis made by M. Guinochet fully satisfied these requirements.

CHOLERA SCARES.

WHENEVER cholera is prevalent on the continent of Europe we get a number of cholera scares, often due to the unfortunate practice of registering cases of acute diarrhœa under the name of English cholera or some similar term. But the latest of these scares seems more than usually unjustifiable. It occurred at an inquest held in the East of London on the body of a young man, who, after having been to the Docks with another lad and having there eaten a large quantity of nuts and beans which were being unloaded, was, together with his companion, seized with vomiting and purging. The companion recovered, but the elder of the two young men, after improving, passed a quantity of blood, and died some five days subsequent to his visit to the Docks. According to the daily press, the jury are stated to have recorded a verdict in accordance with the medical testimony, that deceased died from "cholera." We, on the other hand, hold that such verdict was altogether opposed to the medical testimony, which gave a clear history of death due to the effects of the consumption of nuts and beans in the Docks. No inquiry as to the precise nature of the nuts and beans seems to have been made, whereas there can be no doubt they produced the illness in both of the young men, and led to the death in question. Juries, as well as others who have to do with specifying causes of death, would do well to be more careful, because erroneous certificates or verdicts are likely to do us a national injury, and there is absolutely nothing to be gained by carelessness as to the nomenclature of the affections which are in question.

THE KIDNEY IN DIABETES.

IN a memoir lately published ("Le Rein dans ses Rapports avec le Diabète," Paris, A. Coccoz), Dr. P. S. Inglessis gives the results of his observations upon the renal changes that accompany diabetes mellitus—changes which he avers are more frequent than is commonly admitted. The most constant is hypertrophy of the kidney, a condition doubtless related to the polyuria that is mostly the chief indication of the functional derangement of the organ. This hypertrophy is, according to the writer, characterised not only by obvious enlargement of the kidney, but histologically by a notable increase of the cells of the convoluted tubules. Whilst renal hypertrophy characterises the earlier stages of the disease, renal inflammation is more common in the advanced period. Parenchymatous nephritis is the usual type, but it is difficult often to eliminate all other causes besides diabetes in many cases. In some, however, there is no question of the direct relation between the two affections.

DR. LANGENBECK.

THE numerous friends and patients of the eminent surgeon, Dr. Langenbeck, body physician to the Emperor of Germany, are to be congratulated that he has been dismissed from the Klinik perfectly cured, eleven days after the performance of an operation for cataract by Dr. Hermann Pagenstecher. His Imperial Majesty and many others have sent congratulatory telegrams and messages to the distinguished patient, and to the scarcely less eminent ophthalmic surgeon.

FOREIGN UNIVERSITY AND MEDICAL INTELLIGENCE.

Kharkoff.—Dr. P. Kovalevski, Extraordinary Professor of Neurology and Psychiatry, has been appointed Ordinary Professor.

Bordeaux.—Dr. Demons has been appointed to the Professorship of Clinical Surgery.

Graz.—Dr. Anton Wölfler, a former assistant of Billroth's, has been appointed to the Professorship of Surgery, vacant by the resignation of Professor von Rzehaczek.

Kazan.—Dr. Sasezki has been appointed Professor of General Pathology and Therapeutics, and Dr. Khomyakoff Professor of Clinical Medicine.

Lyons.—Professor Testut has been appointed Professor of Anatomy, and Dr. Fochier Professor of Clinical Midwifery.

Prague (German University).—Dr. Otto Kahler has been appointed Professor of Special Medical Pathology and Therapeutics.

Dresden.—Dr. Ganzen has been appointed Chief of the Lunatic Department of the Town Hospital, in succession to Professor Kraepelin, who has gone to Dorpat.

WE understand that the Commission appointed to inquire into the results of M. Pasteur's inoculations have prepared a draft report, but that they withhold it until they can ascertain the accuracy of the reports of fatal cases which have recently been published. The experiments conducted by Mr. Victor Horsley have, we learn, so far fully confirmed M. Pasteur's statements; but they are not yet complete, and will therefore be left to be detailed in the report.

IT is stated that after the beginning of next year the vacation courses of the Vienna Medical Faculty will be discontinued.

PROF. ARLT, the renowned ophthalmologist of Vienna, is, we regret to learn, suffering from gangrenous thrombosis of the leg.

A MEMORIAL is to be erected to commemorate the death of Mr. Isaac Ratcliffe Lane, of the Army Medical Staff, who was killed at Hasheen, Soudan; it is to be in the form of a "Latten" Brass from the works of Mr. Gawthorpe, of London. He was the youngest surgeon in the British army.

HEALTH OF THE ARMY.

No. II.

THE average strength of the European troops in India in 1884 was 55,252. The ratio of admissions into hospital per 1000 of the force was 1495, of deaths 13·03, of invaliding to England 31·87, and of constantly non-effective from sickness 67·37; the admissions and mean sick were somewhat above, but the deaths and invaliding considerably under the average of the preceding ten years.

The force in Bengal averaged 33,716; the admissions were 1645, the deaths 12·10, the invalids sent home 31·82, and the mean daily sick 70·86 per 1000. Except the deaths and invaliding, these ratios are above the average of the ten years. The death-rate was 6·64 per 1000 under the average, the reduction having taken place chiefly in cholera, diseases of the digestive system, in those of the nervous system, and in paroxysmal fevers. The Lahore division furnished the highest ratio of admissions—2486 per 1000; but it was also very high in the Peshawar, Gwalior, and Meerut divisions, the excess in all of them being chiefly due to the prevalence of fevers. The lowest ratio of admissions was in the Presidency and Oudh divisions. The death-rate was highest in the Gwalior division, amounting to 22·94 per 1000, and lowest in the Saugor and Sirhind divisions, in which it was 5·75 and 6·78 per 1000. Enteric fever was the cause of 423 admissions and 111 deaths, being in the ratio of 12·5 and 3·29 per 1000, both higher than in 1883 and above the average of the preceding five years. It was most prevalent in the second and third quarters of the year, 161 cases and 33 deaths having occurred in the former and 129 cases with 43 deaths in the latter. The disease was widely spread, cases having occurred at forty-seven different stations. Those which furnished the largest number were Lucknow, Morar, Sitapur, Mooltan, Fyzabad, Meerut, Agra, and Rawal Pindi. At Sitapur it was attributed to "an insanitary condition of the latrines near the barracks," and at Fyzabad to adulterated milk, but at none of the other stations could any special cause be traced. At Lucknow the medical officer in charge attributes its origin to "the influence of unaccustomed heat on young persons. This theory is strengthened by the fact that 29 out of 53 cases (in the cantonment) occurred in the Derbyshire Regiment, the most recent arrival in India, and which contained a larger proportion of young soldiers than any other corps in the garrison."

Cholera gave rise to 71 admissions and 45 deaths, being 2·1 and 1·33 per 1000 of the strength. Meerut furnished 28 cases with 13 deaths; Allahabad 10, with 5 deaths; and Dinapore 9, with 7 deaths. They occurred chiefly in the third and fourth quarters of the year. Three fatal cases of hydrophobia are returned: one at Sialkot, in which the period between the infliction of the bite and the death of the boy was 29 days; one at Bareilly, in which it was 81 days; and one at Umballa, in which it could not be exactly ascertained. Under the head of poisons 72 cases, with 1 death by delirium tremens, and 250 cases with 6 deaths by alcoholic poisoning are returned, being in the ratio of 9·55 admissions and ·21 deaths per 1000 of strength from the direct effects of intemperance. There were 22 cases of poisoning by hill nuts, "a species of jatropha," in a detachment on the march between Roorkee and Chakrata; they all recovered. There were during the year 1 judicial, 4 homicidal, and 12 suicidal deaths.

The average strength in Madras for the year was 10,812, the admissions into hospital were 1106, the deaths 9·25, the invaliding to England 32·37, and the mean sick 59·14 per 1000. The admissions were higher, but all the other ratios lower, than in 1883, and all except the mean sick were considerably under the average of the ten years. Rangoon was the station, exclusive of depôts, at which the ratio of admissions was highest, amounting to 1553 per 1000, and Port Blair that at which it was lowest. Of the larger stations

Bangalore had the lowest death-rate—3·98; and Madras and Palaveram the highest—14·92. There were 19 cases of small-pox, with only 1 death; 9, including the fatal case, at Bangalore; 4 at Madras, 2 at Kamptee, 2 at Secunderabad, 1 at Rangoon, and 1 on the march; the disease was epidemic over Southern India. Enteric fever was more prevalent, but less fatal, than in 1883, the admissions being 11·9 and the deaths 1·66 per 1000 of the strength; 60 cases and 1 death occurred at Bangalore; 39, with 10 deaths, at Secunderabad; and 15, with 3 deaths, at Kamptee. No definite cause could be traced for these outbreaks, which occurred chiefly among young soldiers, many of them recent arrivals in India. One-half of the cases and deaths occurred in the third quarter of the year.

Although cholera was very prevalent in most of Southern India, the troops suffered very little from it, the cases having only amounted to 1·1 per 1000; of 12 admissions, however, 10 terminated fatally, and one invalid from Madras died of cholera on the passage home. Three cases occurred at Madras and four at Bangalore, where the disease was epidemic among the civil population. The troops in Madras appear to be very exempt from phthisis, the deaths in 1884 having only amounted to ·55 per 1000, and the average of the preceding five years to ·97 per 1000. Diseases of the digestive system gave rise to a higher ratio both of admissions and deaths than any other class, the former having been 229 and the latter 2·78 per 1000 of strength, the great mortality being due to hepatitis and abscess of the liver, the deaths by which amounted to 2·13 per 1000.

In Bombay the average strength for the year was 10,724; and the admissions were 1415, the deaths 19·76, the invalids sent to England 31·52, and the mean sick 64·70 per 1000. The admissions and invaliding were under, but the deaths and mean sick above, the average of the preceding ten years. The increase in the death-rate was chiefly due to cholera. The highest ratio of admissions, exclusive of the sanitaria, was at Quetta, where it amounted to 2001, and of deaths also, if the small station of Baroda be excepted and troops on the march. The latter suffered most severely, 61 deaths out of a total of 204 in the command, having occurred in an average annual strength of 577. The decrease in the admissions was shown chiefly in cases of paroxysmal fever, but there was scarcely a corresponding reduction in the mortality. Compared with the results for 1883, there was an increase in enteric fever and the deaths from it. It prevailed throughout the year, but especially in the first quarter, at Karachi, and in the last two quarters at Quetta. The prevalence at these stations could not be traced clearly to any insanitary condition of the stations. At Ahmednagar it was attributed to a contaminated milk-supply, and at Deesa, Nasirabad, and Baroda to the water. The cases at Quetta amounted to 27·9 and the deaths to 9·3 per 1000 of strength. Cholera was the cause of 66 admissions and 52 deaths, being in the ratio of 6·2 and 4·85 per 1000; of these, 48 cases and 39 deaths occurred in the 2nd Battalion, North Staffordshire Regiment, on the march from Quetta to Mhow. The disease broke out in it at a camp in the Bolan Pass, and could not be traced to any apparent cause. Exclusive of those among troops on the march the cases amounted to 1·39 and the deaths to 1·03 per 1000, or double the average of the preceding five years. Deolalee and Mhow furnished the largest number of deaths; no local insanitary condition could be found to account for it, but the disease is stated to have been prevalent among the civil population. Diseases of the digestive system were, next to paroxysmal fevers, the cause of the highest ratio of admissions, and, with the exception of cholera, also of deaths. Among the injuries there were seven admissions and six deaths by lightning, which struck the roof of a barrack supported by iron girders at Nasirabad, passed along the punkah wires in the upper storey, killing a man sitting on his cot, to the lower storey, where it killed five men sitting at a table. A severe accident occurred at Kirkee to some men employed in filling shells; the powder exploded, injuring eight men, of whom 2 died, one from fracture of thigh and shock, the other from tetanus supervening on compound fracture of both legs.

The force in Lower Egypt, including the small permanent garrison of sixty men at Suakim, averaged 6468; the admissions to hospital were 1266, the deaths 11·59, the invalids sent home 49·47, and the mean sick 76·85 per 1000. The most prevalent disease was syphilis, by which 266 admissions per 1000 of strength took place; and the most fatal was enteric fever, the death-rate by which was 4·95. There were 25 cases of small-pox with only 1 death; the disease was very prevalent among the natives at Cairo, and vaccination greatly neglected. The admissions by enteric fever were 24·9 and the deaths 4·95 per 1000; it was most prevalent and fatal at Alexandria, where the ratios were 53·7 and 11·56 per 1000; the greatest number of cases came from Ramleh Barracks. The medical officer in charge is of opinion that "the chief cause to be assigned for the prevalence of fever in these barracks must be looked for in the saturation of almost the whole of the soil underneath them by sewage matter in past years, caused by the cesspits and drains being built without inverts, the bottoms being thus left open, allowing the sewage to percolate into the soil." Sunstroke was the cause of 46 admissions and 4 deaths, of which 24 with 1 death took place at Abbasiyeh, "due to the reckless and imprudent exposure of insufficiently protected heads to the sun by young soldiers just arrived from home, aided, no doubt, in some cases by drink." The admissions by diseases of the eye amounted to 53 per 1000, but, with the exception of 1 of purulent ophthalmia, all the cases were of simple conjunctivitis. At Suakim, in an average force of 60 men, chiefly sappers, 3 deaths occurred, all from sunstroke. Fever was very prevalent among them, but did not prove fatal, and no case was returned as "enteric."

In the appendix to the report there is a medical history of the Nile expeditionary force from March 18th, 1884, to July 31st, 1885, by Surgeon-Major Mouat, which may be noticed here. The estimated strength of the regular forces employed with the expedition was 10,771; the admissions into hospital were 8953, the deaths 557, and the number invalided 630—in a period of 500 days. These numbers, therefore, give the *annual* ratio of 607 admissions, 37·75 deaths, and 42·70 invalided per 1000 of strength.[1] Of the deaths, 84 were men killed in action and 42 who died subsequently of their wounds, making a total of 126, or 8·54 per 1000, and leaving 29·21 per 1000 from other casualties and disease. There were 41 cases of small-pox, with 5 deaths—a high proportion in a vaccinated population, but probably due to the circumstances in which the troops were placed on field service. The disease is stated to have been very prevalent among the natives at several of the stations. The greatest cause of mortality was enteric fever, of which 760 cases were admitted, and 277 died. These numbers give the *annual* ratio of 51·51 cases and 18·77 deaths per 1000, the latter being almost exactly half of the total mortality. Upwards of two-thirds of the cases occurred among men under twenty-five years of age, and three-fifths among those under five years' service. At Wady Halfa, where 178 cases and 47 deaths occurred, the disease was considered to arise, to some extent at least, from the insanitary condition of the camp ground and its vicinity, but elsewhere no specific cause could be assigned. The high death-rate was doubtless due in a great degree to the unfavourable conditions for treatment in which the cases were placed, the necessity for moving them without reference to their state, and the exhausting heat to which they were exposed in the desert. There were only 5 cases of scurvy during the whole time under report. Of sunstroke 64 cases were admitted and 13 died, being in the *annual* ratio of 4·34 and ·88 per 1000. Considering the circumstances under which the force was serving, this seems to be a very low proportion. The admissions for conjunctivitis were only 486, or 33 per 1000, considerably under the proportion among the troops in Lower Egypt; they were "mainly due to irritation from pustules of fine sand blown through the camp during dust storms." The admissions and deaths from dysentery and diarrhœa were in the annual ratio of 124 and 4·07. Towards the end of the campaign a too free indulgence in fruits and tinned provisions by the men retiring down the river was a fertile source of bowel affections. Of 39 deaths from injuries, exclusive of those received in action, 37 were by drowning. The wounds received in action occasioned 241 admissions, 42 deaths in hospital and 84 on the field of battle. A classified return of the wounds and injuries admitted into hospital is appended to the Report, and Dr. Mouat has given copious notes respecting their nature and extent and the treatment adopted.

The average strength of officers was 600. The admissions among them were in the *annual* ratio of 625, and the deaths of 49·88 per 1000; of the latter 17·03 were in action, or officers

[1] Surgeon-Major Mouat, in his report, has calculated the ratios upon the average strength of the force for the whole period, but as that extended over 500 days we have reduced them to the *annual* ratios.

who died in hospital from their wounds. The invaliding amounted to 128 per 1000. These ratios are all considerably above those of the troops. Enteric fever was the cause of 57·2 admissions and 18·25 deaths per 1000 of strength, being very nearly the same as among the non-commissioned officers and men. The report gives an analysis of the wounds and injuries received in action and of the operations performed.

The strength of the men of the Royal Navy, Canadian voyageurs, kroomen and others attached to the expedition, was estimated at 2452; the admissions among them were 671, the deaths 71, and the invalided 16. Of the 71 deaths, 60 were due to disease, 3 to accident, and 8 to wounds received in action. We have not reduced their numbers to the *annual* ratios, as the information regarding this portion of the force is in some points defective.

ERRATA.—In the first part of this article, published in our last, several errors of importance unfortunately escaped correction owing to delay in the return of the proof. Thus, on page 370, line 18 from the commencement of the article, the average death-rate of the troops should have been stated as 5·33, not "8·42"; in line 5 of the second paragraph on page 371, for "Royal Engineers" read *Household Cavalry*, the sickness ratio of which arm was 35·19, whilst that of the Foot Guards was 57·53, instead of "29·34" and "48·35" per 1000 respectively. On page 371, first column, line 25 from bottom, insert "with the exception of the admissions" after "higher"; line 10 from bottom and elsewhere, for "Cottonua" read *Cottonera*; 4th line from bottom, for "occurred" read *arrived*; second column, line 17, for "7·52, and 7·01" read *7·52 and 7·09*; page 372, first column, line 7, for "530" read *539*; line 29, for "some" read *seven*; two lines further on, for "moved" read *arrived*; in second line of third paragraph of same column, for "22·3" read *22·03*; in following paragraph, lines two and three should read "was 985; the ratio of admissions into hospital was 1198; of deaths 11·17," &c.; in last line of the column, for 38·33 read *38·23*; finally, in second line of second column, for "and the admissions and mean sick" read *also, with the exception of the mean sick*, &c.

THE OUTBREAK OF ENTERIC FEVER AT LANCING COLLEGE AND SHOREHAM.

THE following is the gist of a report to the Steyning Rural Sanitary Authority by Dr. C. Kelly, sanitary officer of health for West Sussex:—

'GENTLEMEN,—I have to report to you an outbreak of enteric fever at Lancing College, of which I received information on the 23rd instant. On visiting the College on that day with Dr. Fuller, I found that there had been fourteen cases of fever, of which two had died and three had been removed, so that there were then nine boys ill with the disease. Three boys were admitted into the ward on July 7th, another on the 10th, three on the 12th, three on the 16th, and two on the 18th, but some of them felt ill two or three days before going into the ward. The dates of admission seemed to point either to great variation in the incubation period of the disease, or to a source of infection spreading over an interval of several days. Five of those attacked were in a dormitory in the second master's house, and four were in the school house, of whom three were in one room, and one patient, being very ill, was in a separate room. Two of the patients had died, and three had been removed before the date of my first visit. Lancing College contains about 200 boys, a head master, eleven masters, eight men servants, and fifteen or twenty women servants. Besides these, about sixty men are employed near the College in erecting a large chapel, but they had no direct communication with any part of the College. The College stands upon a spur of the chalk downs at an elevation of over 200 feet above the sea; on the north, south, and east sides the ground slopes rapidly away, while it rises to the west. The situation is open, airy, and dry, the grounds extending over an area of 160 acres. To the east of the College, and at the bottom of the hill, there is a large level cricket ground, between a large clump of trees and the river Adur. About a mile and a half away (in a straight line) to the south-east is the town of New Shoreham, where at this time there was also a large outbreak of enteric fever.

"The water-supply to the College is obtained from a fine spring at the base of the chalk downs, whence it is pumped up to a reservoir on the hill side, and thence is conveyed by a pipe across the river Adur up to the College buildings..... The same Company supply various other places, as Portslade and Southwick; but, as there was no outbreak of fever in either of these towns, it did not seem probable that there was any pollution of the water-supply. The drainage of the College is carried away to an outfall to the north-east of the buildings, in a large field, where it is used for irrigating the soil.....There was nothing in the condition of the water-supply or of the drainage system which seemed to account for the outbreak. There is a farm on the College grounds where a few cows are kept to supply milk to the boys; no butter is supplied from this dairy, and all the milk is sent up for the use of the College. The cows are all in good health, and yielded plenty of milk. There had been no cases of illness among those who worked on the farm. The eggs and milk came from the College farm, the bread was made on the premises, the cheese and butter came from Dorsetshire, and the meat from London; so that very little, if anything, came from local sources outside the College grounds. The boys would frequently go to Shoreham in the course of their walks, and they would often go to a confectioner's to buy pastry or sweets; but, except in this way, there was very little communication between Lancing College and Shoreham; and yet the fact that there was a simultaneous outbreak of enteric fever at Shoreham pointed to, or at least suggested, a common cause. In the College cricket field there are two buildings, one used by the cricketers and one used as a 'tuck shop.' Every afternoon Mrs. X., who lives at Shoreham, goes over to the 'tuck shop' to sell her goods. She obtained sweets and lemonade from Brighton, fruits of various kinds from Shoreham, and she had lately been supplying some cream which she maintained did not come from Shoreham, but from the Pad Inn, close to the entrance to the College grounds [where one cow was kept].....The cow yielded about two and a half or three gallons daily, but no accurate measurements were ever taken, nor were any accounts kept, as Mrs. X. paid each day for what she had. But the landlady remembered that she often called for cream as she went by, after the strawberries came in, and she recollected serving her with three pints on one day and two pints on another, besides smaller quantities on other days. She further remembered that these larger quantities were sold on the occasion of the Old Boys' match, because her husband was present, and he saw Mrs. X. coming up to the grounds from his house. This was a two days' match, and it was played on Friday and Saturday, July 2nd and 3rd. On such an occasion a great many were present, and Mrs. X. made provision for it by getting more fruit and cream.....Every boy who was ill had partaken of strawberries and cream, but it was also true that numbers partook of the cream who were not ill at all. A young lady, Miss H., who was present at the Old Boys' match, fell ill at Brighton with enteric fever five days after the match, and some boys who drank from the same portion of cream of which she partook escaped the disease altogether. Some boys who had been rowing on the river the same morning, being too young to play in the match, came back with one of the masters early in the afternoon; tired and hot, they refreshed themselves liberally with the fruit and cream, yet not one of them was attacked. Of the boys who fell ill with the fever, six were in the first eleven, and played in the match. No one can tell how many of those present regaled themselves with fruit and cream; but it was evident that far more escaped illness after partaking of them than the number of those attacked. It has been before stated that the dates of incubation varied very much, so that unless there is a great variation in the incubation period, it is hardly likely that a boy should take infected cream on July 2nd or 3rd, and be admitted into the ward on July 7th, or that Miss H. should fall ill about the same time. It seemed clear that the cream at the Pad Inn was not at fault; and certainly if it were, it could not account for the Shoreham outbreak, as no one from that town drank this milk. Dr. Fuller, the medical officer to Lancing College, from the first expressed a firm belief in the cream being infected. He was attending at this time several patients in the Shoreham Workhouse who were suffering from enteric fever, and they obtained milk from a dairy belonging to A., and those who were ill were chiefly women and children who drank a good deal of milk. Some men who worked on a railway bridge near A.'s dairy at the end of June drank skim milk supplied

oy A., and three of these men fell ill, one of whom was the man who has been mentioned above as lying ill at Portslade. On visiting this dairy Mrs. A. showed by her books that Mrs. X., who supplied the 'tuck shop,' had had cream from her from June 25th to July 3rd, so that there must have been in the cricket field cream from two sources—one from the Pad Inn and the other from A.'s dairy. Mrs. X. had nearly a quart of cream from A.'s dairy on Friday, June 25th, a quart on the 26th, a quart on the 28th, a pint on the 29th, a pint on the 30th, ninepennyworth on July 1st, and sixpennyworth on July 3rd, after which date she had no more. If this cream were infected, those who drank of it were liable to infection during the whole of the week previous to the Old Boys' match on July 2nd and 3rd, as Mrs. X. supplied cream to no one else but those who frequented the cricket field. Further inquiry showed that there was a cricket match on Saturday, June 26th, in the College grounds, between the boys and an eleven from Tunbridge, and on this day a quart of cream was taken up by Mrs. X., who probably had some more on the same day from the Pad Inn. I think it is clear that these creams were kept in separate vessels. Mrs. X. brought A.'s cream in an oval tin, holding about half a gallon, while the cream from the Pad Inn was put in a jug or in a tin belonging to the inn dairy. The liability to catch the disease was probably greater on June 26th and on the first three days of the following week than on July 2nd and 3rd, when only small quantities of cream were obtained from A.'s dairy, while three pints were supplied on July 2nd from the Pad Inn dairy, and a quart from the same place on July 3rd. The price of cream at A.'s dairy was 2*s.* a quart, so that 9*d.* would purchase three-fourths of a pint, and 6*d.* would represent half a pint. Miss H. was at the match on June 26th with her sister, and they had on that day some cream, and it must have been on that day that she became affected; the cream which she had at the Old Boy's match, and which others shared without falling ill, was probably of good quality. The various dates on which the boys fell ill can now be accounted for, since the source of infection was present not for one day only, but for a space of seven or eight days. Miss H.'s sister was poorly for a few days, and, as her temperature on one occasion rose to 103° F., it is probable that she also was in some degree infected on June 26th. Of the boys who were attacked, one was fourteen years of age, one fifteen, two sixteen, seven seventeen, and three eighteen. The reason why none of the younger boys were attacked may be accounted for by the fact that the older boys having more pocket-money were able to buy the fruit and cream, while the younger ones put up with some cheaper form of refreshment. When it was quite clear that cream from A.'s dairy had been supplied during the last week in June, and when others had failed about the same time at Portslade and New Shoreham who had been drinking milk from the same dairy, it seems almost certain that there must have been a common origin for the outbreaks at the College and at Shoreham, and that the milk from A.'s dairy was the common source of infection. This view is confirmed by the fact that there has been no fresh case of fever at the College since July 18th, and the cream-supply was stopped on July 3rd, while there have been many fresh cases in Shoreham since that date amongst those who continued drinking this milk."

Dr. Kelly then proceeds to give a detailed description of the drainage and water-supply at A.'s dairy, with the result that he shows leakage from the drain into the well was at least a probability. He then states, "There was no case of illness in A.'s house, nor had there been any for a long time. There is no evidence of anyone having had enteric fever just before the outbreak, so that the sewers might have become infected with the discharges from such a case, but enteric fever has, in recent years, been very common at Shoreham, and the sewers are not very well ventilated..... There were six cows at A.'s dairy, but one of these was not in milk; they were said to be in good health and to yield plenty of milk. They were not seen until July 26th, so that their condition during the last fortnight of June could not be ascertained. Mr. Knight of Brighton, who has recently examined the cows, has found nothing in their condition to account for the outbreak. All proper precautions have been taken by Dr. Fuller as to the disinfection and burying of all discharges, and the drains have been well flushed. As no fresh cases have occurred since July 18th, the outbreak of enteric fever is now at an end, and the remaining patients are all recovering. The outbreak has, therefore, been due not to any defects in the sanitary arrangements of the College itself, nor to any pollution of the water-supply, but to impure cream being taken under conditions which cannot occur again. The well at A.'s dairy has been closed, and good water is now supplied there from the public main."

Worthing, July 29th, 1886.

BRITISH DENTAL ASSOCIATION.

ONE of the most successful meetings of the increasingly popular British Dental Association was held last week at the School of Mines, Jermyn-street, under the presidency of Sir John Tomes, the president of the year, Mr. Richard White, being unfortunately too ill to attend.

Of the papers read on the first day, that of Mr. George Cunningham, on the Relation of Dentistry to the State, was perhaps of the most general interest, and the moderation and practicability of the view expressed are sure to meet with general approval. He recognises fully that the army surgeon, who is already expected to be a veritable "Admirable Crichton" in surgery, medicine, midwifery, drill, ambulance, a capable administrator, able to select suitable sites for camps, to be competent to perform complex analyses of food and water, &c., cannot be expected to be likewise a dental specialist, but still he maintains that something might and ought to be done in conservative treatment of the teeth, something more than the radical cure—extraction; in fact, that the army surgeon should have to produce a certificate of having attended a course of lectures and gone through a course of clinical instruction in dental operative surgery at a general or special hospital. It seems, several have gone further than this, and qualified in dental surgery at the Royal College of Surgeons. The "regulation army extracting case" seems to be of a very antiquated description, the key, of which the modern dentist has had no experience, and forceps, which it would be difficult for a specialist to know for what purpose they were intended, are the armamentaria. The "stopping case," on the other hand, contains gold foil, as if the most skilful dental surgeon was expected, but omits a mirror to see the cavity, and tweezers to insert a dressing. We cannot now discuss further this paper, but we are sure that the Army Medical Department, who have done so much in recent years to promote the efficiency of the service, will improve and modify their dental equipment.

Messrs. Morton Smale and Hutchinson read an excellent paper on Dental Education, and very strongly urged that every dental student should take the L.R.C.P. and M.R.C.S. under the Conjoint Scheme in which we agree; they or one of them, should, however, be regarded not only as an advantage, but as a *sine qud non*.

On Friday the great attraction was the Demonstrations, principally in gold fillings, at the Dental Hospital of London, and amongst the patients there was a well-known dental practitioner, which caused considerable amusement. Electricity, both as an illuminator and a motor, was conspicuous in the exhibit of dental apparatus. The day's proceedings terminated with the annual dinner, under the presidency of Sir Edwin Saunders, which took place at the Criterion. Sir Edwin, in a very apt and appropriate speech, proposing the toast of the Queen, enlisted the sympathies of his audience by stating that Her Majesty had once observed to him, "Yours is a most useful profession; for while some require the services of the oculist, a still smaller number the aurist, almost all, sooner or later, have need of those of the dentist." The principal toasts were that given by Mr. Sibley, "The Prosperity of the British Dental Association," to which Mr. Frederick Canton, the hon. secretary, replied, and "The Royal College of Surgeons," proposed by Mr. Smith Turner and responded to by Professor John Marshall; several others followed. The meeting was a great success, being well attended.

The business and festivities of the week culminated in the garden party, given by Sir Edwin Saunders, at his charming residence, Fairlawn, Wimbledon, which was a complete success, notwithstanding that many members of the profession and personal friends of Sir Edwin and Lady Saunders were prevented from attending. H.R.H. Princess Mary of Cambridge (Duchess of Teck) wrote expressing her regret that unforeseen circumstances prevented her from being present as she had intended and wished.

WILLS OF MEDICAL MEN.

THE will and codicil of Mr. Wm. White Cooper, F.R.C.S., F.R.G.S., late of 19, Berkeley-square, who died on June 1st last, were proved on July 24th by Dame Mary Elizabeth Cooper, the widow, and Mr. George Cox Bompas, the acting executors, the value of the personal estate amounting to upwards of £28,000. The testator bequeaths £500, and all his household goods, furniture, pictures, plate, wines, and effects to his wife. All his real estate and the residue of his personal estate he leaves upon trust to pay the income to his wife for life; at her death he gives £1000 to each of his daughters, and the ultimate residue is to be held upon further trust for all his children in equal shares.

The will and two codicils of Thomas Boycott, M.D., late of 46, Montagu-square, who died on May 12th last, were proved on July 16th by Mr. Alfred Paget Humphry and Mr. Hugh McNab Humphry, the executors, the value of the personal estate exceeding £17,000. There are bequests to his wife, daughters, and son-in-law, and the residue of his property the testator leaves upon trust for his wife for life, and then for all his children in equal shares; his son-in-law, Mr. A. P. Humphry, to take the share of his deceased daughter, Elizabeth.

The will of Mr. Francis Mason, F.R.C.S., surgeon of St. Thomas's Hospital, late of 5, Brook-street, Grosvenor-square, who died on June 5th last, was proved on July 23rd by Mr. Edmund Routledge and Mr. Henry Sturt, the executors, the value of the personal estate amounting to over £5000. The testator bequeaths to his wife, Mrs. Jane Mason, the cash in the house and at his bankers, and his furniture, plate, household effects, horses, and carriages; and there are legacies to his own and his wife's godchildren, executors, domestic servants, and coachman. The residue of his real and personal estate, in default of children, he leaves as to the income of one moiety to his wife for life, and subject thereto for his nephews and nieces, the children of his late brother, John Nicholas Mason.

The will of Mr. Hutchinson Royes Bell, formerly of 44, Harley-street, but late of 12, Queen Anne-street, Cavendish-square, surgeon, who died on June 15th last, was proved on July 31st by John Hougham Bell, M.D., the brother, the surviving executor, the value of the personal estate amounting to upwards of £12,000. The testator leaves his real estate at Dunkeeling, Yorkshire, to his brother Mark Sever Bell, and legacies to his brother John Hougham Bell and to his sisters. The residue of his property he gives to his said two brothers in equal parts.

The will and codicil of Charles Girdlestone, M.D., late of the Château de la Falaise, Biarritz, who died on June 14th last, were proved in London on July 27th by Mrs. Eliza West Girdlestone, the widow, and Mr. Reginald Henry Thorold, the executors, the value of the personal estate being under £2000. The testator gives all his real and personal estate to his wife.

The will of John William Mudge, M.D., J.P., Deputy Inspector-General of Hospitals, on the retired list of H.M. Indian army, late of Middleham House, Ringmer, Sussex, who died on May 3rd last, was proved on July 20th by Mrs. Julia Mudge, the widow, and Major-General Lambert Henry Denne, the executors. The testator bequeaths £200, and all his furniture, plate, pictures, books, wines, and consumable stores, household goods and effects, horses and carriages, to his wife; and legacies to his two daughters and to a cousin. The residue of his real and personal estate he leaves upon trust to pay the income to his wife for life, and then for his two daughters in equal shares.

The will of William Benjamin Scott, M.D., late of 16, Stonebridge Park, Willesden, who died on November 2nd last, was proved on July 19th by Mr. Alfred Roots and Mr. George Roots, the executors. The testator leaves all his real and personal estate, except what he succeeded to from his mother, to Elizabeth Roots.

The following legacies have recently been left to hospitals and other medical charities:—Mr. Charles Charlesworth, of Heaton, near Bradford, Yorkshire, £500 to the Bradford Fever Hospital.—Mr. Robert Charles Ransome, J.P., of Ipswich, £100 each to the East Suffolk Hospital and the Suffolk Convalescent Home, Felixstowe.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Kensington.—The death-rate for this important parish during 1885 was 16·1 per 1000. The deaths from the so-called seven principal zymotic diseases were 57 more than in 1884, but 67 below the corrected decennial average. Dr. Dudfield's report deals with a large number of subjects having direct or indirect bearing upon the sanitary state and healthiness of his district as a portion of the metropolis, and he hence reviews the subject of scarlet fever in relation to disease in the cow, the state of preparation maintained in view of a possible importation of cholera, and the arrangements in force as to the removal of infectious cases, whether as regards ambulances or by means of the hospitals provided in and outside the metropolitan area. Indeed, the report forms an excellent summary of all the action taken hitherto by the Metropolitan Asylums Board in the fulfilment of their important duties. Pending the compulsory notification of infectious diseases, a voluntary system has been organised in Kensington, news being received as to deaths or cases of infectious diseases from registrars, relieving officers, the Asylums Board, the resident medical officers of the hospitals and dispensaries, the postal authorities, clergymen and district visitors, and at times from private medical practitioners; and, reviewing the results of this system, Dr. Dudfield shows by means of statistics that when the period of eleven years during which the system has been in operation is compared with a corresponding period antecedent to its inauguration, there has been a diminution in the number of "zymotic diseases" to the extent of 1441. He does not doubt that many causes have together contributed to this result, but he evidently cannot dissociate it from the early information received from the sources indicated. In addition to 956 sublet houses already registered in the parish, notice has been served in respect of 546 houses let in lodgings, and although the owners of these houses in several instances profess that their registration will do them an injury, yet experience is so far in an opposite direction, and in Kensington it is believed that registration will come to be regarded as a guarantee that the house is in a good condition, as soon as the vestry's instructions have had time to be fulfilled.

Wandsworth District.—In a population of 248,410, the birth- and death-rates for 1885 were 34·6 and 16·8 per 1000, the latter being a lower rate than any obtaining during the previous ten years; and it is interesting to notice that there has been an almost steady diminution in the death-rate during the series of years since 1851-60, when the average rate stood at 20·4 per 1000. The smallest death-rates for last year were 11·2 and 12·4 in Putney and Clapham, and 17·0 and 17·5 in Wandsworth and West Battersea respectively. Amongst the special causes of death, diarrhœa is referred to in connexion with the whole of the metropolis, and it is shown in a tabular form that there is a distinct relationship between excesses of death from this disease and high temperatures, the relationship being attributable to the rapid production of fermentative and putrefactive changes. The water-supply suffers from changes of temperature in so far as that which is derived from the Thames is concerned. Thus, the extremes of temperature for that supply have been 37·0° and 70·5° F., as compared with a variation between 53·6° and 58·1° only in the deep well-water distributed by the Kent Company. The need for a uniform constant service is urged in the report. In the Local Summaries each of the six medical officers of health presents a separate report.

Leicester Urban District.—Dr. Henry Tomkins, in issuing his first annual report on the sanitary condition of this borough, deals separately with all the more important circumstances affecting the health of the population, and in several respects he advocates that further progress should be made. Thus, Leicester being well provided with public slaughter-house accommodation, and cleanliness being so prominent a matter to hold in view in connexion with all food supplies, he urges that the time has come for the gradual abolition of the private slaughter-houses from amongst the houses of the people. He also points out that the existing borough infec-

tious hospital, erected during a period of small-pox epidemic, does not properly meet the requirements of the district. It is freely admitted that the hospital has done, and is still doing, excellent service; but the accommodation provided is unsatisfactory, the means for separating cases needing special isolation are most imperfect, and some parts of the structure are old and worn out. Some alterations and extensions were made during the past year, but we fear that nothing short of a good deal of preliminary demolition of existing buildings will place Leicester in the position it should occupy in this respect. Referring to comments which have appeared in this journal as to the failure which has been evident in many towns having hospitals and immediate notification of infectious diseases, to reduce the amount of scarlet fever, it is admitted that as regards Leicester the only feature that one can point to with any sense of satisfaction is the low mortality that has occurred, and this especially as regards those who received hospital treatment. Small-pox appeared in the borough in four instances. All the cases were removed to the hospital outside the borough, and those persons known to have been possibly infected by them were induced to go to the "quarantine," wards, four more subsequently falling ill there, and the remainder being discharged after the lapse of the usual incubation period of the disease. The birth and death-rates for 1885 were 34·4 and 19·4 respectively per 1000; the latter being one of the lowest rates Leicester has experienced. The deaths under one year of age were 193 per 1000 registered births, this being the highest rate, except 218 at Preston, of any of the twenty-seven largest towns, metropolitan and provincial. Of the deaths producing this rate in Leicester, 276 were from diarrhœa.

Warrington Urban District.—On a population of over 45,000 the birth and death-rates for 1885 were 40·25 and 18·45 respectively, the latter rate being the lowest ever recorded in Warrington since statistics have been published. The rate from the so-called zymotic diseases was also a low one. Not a single death occurred amongst the inhabitants from either small-pox or scarlet fever; but of the latter disease 20 attacks were reported, 8 occurring in the workhouse, and 10 of the remainder being removed to the isolation hospital. Enteric fever has been of somewhat common occurrence in a special portion of the town, where sewer emanations and nuisances from pigstyes, stables, and middens are much too common. Since the Corporation opened their infectious hospital in 1877, the number of cases admitted has been 925; of these 27 were admitted last year. The cost of maintaining this very complete establishment was somewhat over £776 last year. But against this may be set the fact that, although Warrington possesses a system of compulsory notification of infectious diseases, Mr. Gornall is able to point out that the number of cases which it is found necessary to remove to hospital has diminished year by year, until it was in 1885 at its lowest ebb. Such a result cannot be otherwise than a substantial financial gain to the community concerned. The existence of the hospital, amongst other things, prevents resort, in times of disease prevalence, to "panic remedies," which are as a rule both costly and altogether unproductive.

Scarborough Urban District.—Dr. Taylor commences his report with a very complete meteorological history of Scarborough during 1885. The death-rate from all causes during the year stood at 16·7, which is by no means unsatisfactory, and the zymotic rate was as low as 0·7 per 1000; the two diseases of the latter class which caused most mortality being measles and diarrhœa. Considerable care has for some years past being exercised with a view of improving the standard of health in this watering-place, and the statistics which are recorded in the report go to show that this action has not been unrewarded. Great care is given to the disinfection of infected houses and articles, and the private sanatorium is spoken of as being of infinite service to the town for the immediate isolation and treatment of infectious disorders. Great improvements have been secured in connexion with the water-service, and a large amount of current sanitary work is continually in progress.

Stratford-on-Avon Combined District.—Mr. Fosbroke's re-election to this combination of districts after twelve years' service is evidence that his labours are appreciated, and this the more since the combined authorities desired to make the appointment without any limit as to duration—an arrangement which was objected to at Whitehall on grounds which were "not personal" to him. In other words, the ever-looming County Board Bill still blocks the way in this and in many other directions. The clashing interests of education and health are referred to under circumstances which, it might have been hoped, were such as could not occur in view of the provisions of recent Education Codes. The voluntary system of notifying infectious diseases in this district is stated to work without friction. In addition to the hospital in the Alcester district, it is to be hoped that one will be established for the Evesham joint district before the expiration of the present year. The plans have already been prepared and approved by the Local Government Board. Amongst the important sanitary works that have been dealt with, the completion of the Evesham water-works may be named; a scheme for the supply of Stratford-on-Avon is also wellnigh completed. Evesham and Stratford have revised their bye-laws, and the Alcester authority intend to take action in the same direction.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5876 births and 3400 deaths were registered during the week ending August 21st. The annual death-rate in these towns, which had declined in the preceding three weeks from 20·6 to 18·9 per 1000, rose again last week to 19·5. During the first seven weeks of the current quarter the death-rate in these towns averaged 19·6 per 1000, and was 2·1 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 11·9 in Derby, 14·4 in Wolverhampton, 15·1 in Bristol, and 15·5 in Blackburn. The rates in the other towns ranged upwards to 25·7 in Salford, 27·9 in Birkenhead, 28·9 in Liverpool, and 36·8 in Norwich. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had declined from 877 to 718 in the preceding three weeks, rose again last week to 805; they included 606 from diarrhœa, 52 from whooping-cough, 49 from measles, 40 from "fever" (principally enteric), 32 from scarlet fever, 26 from diphtheria, and not one from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Plymouth, Halifax, and Huddersfield; and the highest in Salford, Leicester, and Norwich. The mortality from diarrhœa showed an increase, the largest excess being recorded in Birkenhead, Leicester, Liverpool, and Norwich. Measles caused the highest death-rates in Preston; scarlet fever in Salford; whooping-cough in Preston and Sunderland; and "fever" in Preston, Portsmouth, and Cardiff. Small-pox caused no death either in London and its outer ring or in any of the twenty-seven large provincial towns. No small-pox patients remained under treatment in the metropolitan asylum hospitals at the end of last week, the number on the preceding two Saturdays having been 8 and 5 respectively. The deaths referred to diseases of the respiratory organs in London, which had been 148 and 150 in the preceding two weeks, were last week 151, and 38 below the corrected average. The causes of 89, or 2·6 per cent., of the 3400 deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Norwich, Leicester, Newcastle-upon-Tyne, and in four other smaller towns. The largest proportions of uncertified deaths were recorded in Liverpool, Sunderland, Huddersfield, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 18·8 and 17·4 per 1000 in the preceding two weeks, rose again to 17·9 in the week ending August 21st; this rate was 1·6 below the mean rate of the same week in the twenty-eight English towns. The rates in the Scotch towns ranged from 11·5 in Perth and 11·8 in Greenock to 20·5 in Glasgow and 32·1 in Paisley. The 441 deaths in the eight towns showed an increase of 11 upon the number in the previous week, and included 23 which were referred to diarrhœa, 22 to whooping-cough, 9 to measles, 8 to scarlet fever, 5 to diphtheria, 5 to "fever" (typhus, enteric, or simple), and not one to small-pox; in all, 72 deaths resulted from these principal zymotic diseases, against 77 and 63 in the preceding two weeks. These 72 deaths were equal to an annual rate of 2·9 per 1000, which was 1·7 below the mean rate from the same diseases in the

28 English towns. The deaths referred to diarrhœa, which had been 28 and 18 in the preceding two weeks, rose again last week to 23, of which 15 occurred in Glasgow, 4 in Paisley, and 3 in Edinburgh. The annual death-rate from diarrhœa in these Scotch towns last week averaged only 0·9 per 1000, whereas the mean rate from the same cause in the twenty-eight English towns was 3·5. The 22 fatal cases of whooping-cough exceeded by one the number in the previous week, and included 18 in Glasgow. The 9 deaths from measles showed a further increase upon the numbers in the preceding two weeks, and included 4 in Glasgow, 2 in Edinburgh, and 2 in Leith. The 8 deaths from scarlet fever showed a decline of 4 from the number in the preceding week; 7 occurred in Glasgow. Two of the 5 fatal cases of diphtheria were recorded in Edinburgh, and 3 deaths from fever occurred in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 60 and 71 in the preceding two weeks, declined last week to 62, but exceeded by 11 the low number in the corresponding week of last year. The causes of 75, or 17 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had increased from 17·3 to 20·8 per 1000 in the preceding three weeks, further rose to 21·9 in the week ending Aug. 21st. During the first seven weeks of the current quarter the death-rate in the city averaged 20·2; the mean rate during the same period was 20·2 in London and 18·4 in Edinburgh. The 148 deaths in Dublin last week showed an increase of 7 upon the number in the previous week, and included 9 which were referred to diarrhœa, 5 to "fever," 4 to scarlet fever, 1 to whooping-cough, 1 to measles, 1 to diphtheria, and not one to small-pox. These 21 deaths from the principal zymotic diseases considerably exceeded the number returned in any recent week, and were equal to an annual rate of 3·1 per 1000, the rate from the same diseases being 3·8 in London and 1·8 in Edinburgh. The fatal cases of diarrhœa, which had been 2 and 4 in the preceding two weeks, further rose to 9 last week. The deaths referred to "fever" were 5, against 2 in each of the previous two weeks. The 4 fatal cases of scarlet-fever exceeded by 3 the number in the preceding week. Seven inquest cases and 3 deaths from violence were registered; and 38, or more than one-fourth of the deaths, were recorded in public institutions. The deaths of infants corresponded with those in the previous week, while those of elderly persons showed a decline. The causes of 18, or more than 12 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

IN accordance with the decision to strengthen the medical department of the Upper Burmah Field Force, Surgeon-Major G. C. Roy, and Surgeons R. D. Murray, G. M. Dixon and W. Deane, are already ordered thither.

The services of Surgeon-Major Aylmer Hayes, Medical Staff, have been placed at the disposal of the Egyptian Government for duty with the Egyptian Army. Surgeon-Major Hayes proceeds at once.

Surgeon-Major J. F. Beattie, Medical Staff, now serving in the London district, has been ordered to proceed to Netley and assume the duties of Assistant-Professor of Medicine at the Army Medical School, Royal Victoria Hospital.

ADMIRALTY.—The following appointments have been made:—Surgeons George H. Milne, Alfred E. Weightman, James W. O. Underhill, Charles H. Upham, Frederick J. Burns, Alfred T. Rimmell, Daniel Patrick M'Nabb, James France, Charles Strickland, John Menary, Walter G. Axford, Walter C. Spiller, George T. Broatch, William Bett, Henry W. Rickards, Frederick A. Brise, and John W. Slaughter, to the *Duke of Wellington*, additional, for Haslar Hospital.

THE epidemic of fever which has existed for several weeks at Hare Island, off the coast of Cork, near Skibbereen, still continues, fresh cases being reported from the island and from the mainland close by.

Correspondence.

"Audi alteram partem."

THE HOSPITAL FOR WOMEN, LIVERPOOL.

To the Editor of THE LANCET.

SIR,—As the Consulting Medical Officer to the Hospital for Women, Shaw-street, Liverpool, and as one of the unwilling witnesses subpœnaed by the plaintiff in the case of Casey *v.* Imlach, may I ask you to give insertion to the following statement, which I think is due to my professional brethren and to myself, of what my action had been in regard to the surgical practice of that hospital, especially during the six months immediately prior to the trial.

I had during the autumn of last year come to be aware, although I had not actually been present at many of these spaying operations, that they were being performed with increasing frequency, and when the Hospital Medical Report for the year 1885 appeared on Jan. 28th of this year I made a careful analysis of its contents, comparing it with the Report for 1884, and was dismayed at the record of the year's work. I thereupon, on Feb. 3rd, took upon myself the responsibility of writing a letter to the committee of the hospital on the subject, stating the bare facts that, according to the Medical Report for the year 1884, there were in that year thirty-one women completely spayed; while, according to the Report for the year 1885, the number of complete spayings had risen to ninety-six. At the same time I called their attention to this enormous increase in these operations, and stated that, as far as I knew, there were only four real consultations prior to operation in the whole number of 169 abdominal sections, although Law 39 says: "No operation of a dangerous character shall be performed in the hospital without a consultation between one of the medical officers for in-patients, or one of the consulting medical officers [there is but one] and the operator." I then went on to say: "That these operations are occasionally necessary, and are a valuable addition to the resources of scientific surgery, every surgeon will freely admit; but considering the very important ethical questions involved in such extremely delicate matters, it is but natural and right that the profession, as a body ever jealous of its honour, should view with anxious watchfulness any appearance of these operations being performed without (1) all possible precautions against errors of diagnosis and prognosis; (2) without proved necessity; (3) without clear and full information of the exact nature and necessary consequences of such operation having been previously given to the patient and her immediate relatives. It has come to my knowledge of late that many members of the profession in this city think they have reason to believe that in the Hospital for Women such necessary precautions have not always been taken; such necessary information as to the nature and consequences of the operation has not always been previously given to the patient and her immediate relatives; and, indeed, that these operations have, in some instances, been performed without due proof of their necessity." I then called attention to the cases of hæmatocele and hæmatosalpinx, in which this operation of removal of the uterine appendages had been performed, and of the inadmissibility of which operation in this class of cases I expressed my decided opinion, on the ground of the almost uniformly successful result of the generally recognised treatment by absolute and prolonged rest, with or without the addition of very simple and well-known medical treatment. So successful has this treatment hitherto been, not only with all those leaders of medical opinion who have written on this subject during the last twenty years, but with ordinary practitioners of standing with whom one comes into contact in daily professional work, that it is quite exceptional to find one of these latter who can remember a fatal case. To say the least of it, judging by the Hospital Medical Report for the year 1885, removal of the uterine appendages for hæmatocele and hæmatosalpinx has not been a successful practice, for out of nine cases operated on there were three deaths, a mortality of 33 per cent. It would appear as if the disciples of modern abdominal surgery had ceased to believe in the recuperative powers of nature, except as a consequence of their own operations.

The immediate consequences of this letter of Feb. 3rd to the committee were: first, that on the day following (Feb. 4th), at one of the largest meetings of members ever held in the Liverpool Medical Institution, it was unanimously resolved on my proposal to appoint a select committee of the leading members "to consider the grave questions of practice and ethics involved in the performance, in greatly increasing numbers, of these operations at the Women's Hospital, Shaw-street." (Being from home, I have not at hand the exact wording of the resolution, but what I have written is practically the substance of it.) The committee appointed at the same meeting, and without challenge, consisted of the following members: the president (Dr. Nevins), Dr. Cameron, Dr. Waters, Mr. Bickersteth, Mr. Mitchell Banks, Dr. J. H. Wilson, Dr. Macfie Campbell, and Dr. Alexander. Shortly after this, the committee of the hospital called upon their acting medical officers to report on every case of abdominal section during the year 1885, and their medical board to report as fully as possible on each case, with the condition of each patient up to the time of reporting; these reports to be sent into the Hospital Committee, who will transmit the same to the Medical Institution Committee for investigation and report. It will be readily understood how these reports, especially the following up the patients to their homes, many of them in the meantime having removed, and some more than once, have involved a great amount of time and trouble; but after several long and unavoidable delays, the report of the Medical Institution Committee will not now, it is expected, be very long delayed.

The trial Casey *v.* Imlach was an extremely unpleasant episode in this altogether unpleasant business, and not the least so to those who, like myself, were forced to appear in the disagreeable position of witnesses for the plaintiff, a person whom I had never seen, and about whose case I knew nothing until I heard her counsel make his opening speech. Holding the opinions I did as regards these operations, I can imagine no more unenviable position to be in; but it is a great consolation to know that you have written favourably of my evidence.—I am, Sir, yours truly,

August 23rd, 1886. THOMAS F. GRIMSDALE.

INTRA-PERITONEAL HÆMATOCELE.

To the Editor of THE LANCET.

SIR,—The difficulty in assenting to Mr. Lawson Tait's proposition, "that intra-peritoneal hæmatocele is fatal in 95 per cent. of the cases," does not seem to be removed by his letter in your current number. Take the cases where, during a menstrual period (the preceding period having occurred as usual), a patient, not rarely while making some violent effort, is suddenly seized with severe pain in the lower part of the abdomen, fainting, perhaps vomiting, and becomes markedly anæmic. These symptoms are often associated with temporary cessation of the menstrual discharge that was in progress, and its reappearance in a few hours. The next day a tumour is felt in the situation of Douglas's pouch, depressing the posterior fornix and pushing the uterus forwards. Sometimes the tumour is large enough to be felt through the abdominal wall above the pubes. Such cases are usually considered to be due to regurgitation of menstrual blood along the Fallopian tubes into the peritoneum. It is certain that a large proportion of cases with the train of symptoms and physical signs described recover completely. But for that very reason Mr. Lawson Tait cannot regard them as intra-peritoneal hæmatoceles.

I am, Sir, your obedient servant,

ARTHUR H. N. LEWERS, M.D. Lond.

Wimpole-st., Cavendish-square, Aug. 23rd, 1886.

THE CHOLERA EPIDEMIC IN VENICE.

To the Editor of THE LANCET.

SIR,—I beg to point out a peculiar feature in the "cholera epidemic" in Venice. It is essentially a poor man's disease The well-to-do are free from it, with rare exceptions. Not very long ago I asked a gentleman, who from his position was most competent to speak on the subject, how many well-to-do people he had known to have died of the disease. He could not get beyond four, and one of these, to my knowledge, was a very doubtful case. When soup-kitchens and a cheap supply of food were set on foot the cases rapidly diminished. This may also have been due to the absolute prohibition of the sale of shell-fish and crustaceans, which came into force at the same time; and also to special precautions being taken to prevent the sale of bad fish and vegetables. The quantities of these seized and destroyed are simply incredible. I was told a few days ago of a man who, convalescing from double pneumonia, chose to eat two "folpe" (octopi). He was seized by cramps and vomiting, and of course was supposed to have cholera. Quarantines and "observations" go on as usual, trade suffers, and half-starved workmen and their wives and children are ready victims to attacks which, in the case of well-nourished individuals, would only require a little rest and mild treatment. The lower classes in Italy are, as a rule, sober; but they have a habit of over-eating themselves on certain occasions, and then they suffer severely. A great feast day was always followed by an increase in the number of cases. I have not heard of any case in an hotel here, but have seen one case of catarrh from exposure to cold, where the severity of the symptoms might have given rise to suspicion. Appropriate treatment soon effected a cure. I cannot see any reason why tourists should avoid Venice, if they will only take reasonable care of themselves. Very many of them, already run down by over-work, work harder still at sight-seeing, and suffer more or less from long railway journeys with irregular meals. The only wonder is that more of them do not get ill. A good deal might be said as to why so much is made of this epidemic, but it would not be appropriate in your columns.—I am, Sir, yours faithfully,

J. A. MENZIES, M.D.

Palazzo Banco Veneta, Venice, August 15th, 1886.

THE INCUBATION PERIOD OF DIPHTHERIA.

To the Editor of THE LANCET.

SIR,—The extreme importance of the above must be my apology for wishing to intrude these few lines into your valuable space.

When house-physician at King's College Hospital last winter, it happened that we were able, in two particular cases of diphtheria, to fix the exact period of incubation. At 10 P.M., on November 8th, the house-surgeon performed tracheotomy on a case of diphtheria. The operation, being a difficult one, took a considerable time. On the evening of November 10th, the house-surgeon himself complained of sore-throat, which was followed next day by the appearance of membrane. The incubation period here being a little under forty-eight hours. On Nov. 15th, some jelly which the house-surgeon had begun to eat, but had not finished, was removed to the kitchen at the end of the ward, and between 1 and 2 P.M. one of the ward maids partook of some with the same spoon as the house-surgeon had used. In the afternoon of November 17th she was attacked with sore-throat, which was followed by membrane. Here the incubation period was a little over forty-eight hours.

I am, Sir, yours obediently,

PERCY G. LEWIS, M.R.C.S.,

August 17th, 1886. Associate of Kings' College.

DIRECT REPRESENTATION OF THE PROFESSION.

To the Editor of THE LANCET.

SIR,—The medical journals are quite right in naming me as a candidate for the direct representation of the profession in the General Medical Council, and when the proper time arrives I shall issue my address. In the meantime I trust the general practitioners will stand fast, and hold firm to the determination not to support any candidate who is not in general practice.—I am, Sir, yours truly,

EDWIN MORRIS,

General Practitioner of forty-five years' standing.

Spalding, August 23rd, 1886.

HULL HOSPITAL SUNDAY MOVEMENT.—The annual report of the general committee of this movement shows that the collections last year realised £738, and after the payment of expenses £554 were given to the Royal Infirmary, £20 to the Hull Dispensary, £66 to the Children's Hospital, and £23 to other institutions, leaving a small balance. It was resolved to fix Oct. 31st for the next collection.

IRELAND.

(From our own Correspondent.)

CASTLEBAR LUNATIC ASYLUM.

AT a meeting last week of the governors of this asylum, Dr. Finegan, resident medical superintendent, stated that that was the last meeting he could attend, in consequence of having been appointed to the charge of the Mullingar District Lunatic Asylum. Before leaving he pointed out as objectionable the practice adopted by the coroner of holding inquests in every case of death which took place in the asylum. This is a source of considerable inconvenience to the officials, and should only be carried out when a sudden death takes place, which is the usual practice in lunatic asylums, and the governors intend drawing the attention of the coroner to the subject. The Board unanimously adopted the following resolution:—"It having been notified to the Board by the Lord-Lieutenant that Dr. Arthur Finegan has been transferred to Mullingar District Asylum, the Board wish to record their satisfaction at the manner in which Dr. Finegan discharged his duties during the time he acted as resident medical superintendent, from July 1st, 1885. He has conducted the work of the institution with much efficiency, and has given every attention to the afflicted inmates who have been under his care."

THE LATE DR. JOSEPH LALOR.

This gentleman, who recently resigned the post of resident medical superintendent to the Richmond Lunatic Asylum, Dublin, died at Sligo on the 17th inst., aged seventy-five years. Previously to his appointment at the Richmond he acted as resident physician to Kilkenny District Lunatic Asylum. Dr. Lalor was a graduate in medicine of Glasgow University, and an ex-president of the Association of Medical Officers of Asylums and Hospitals for the Insane. He published some papers on Dysentery and Fever, and was a contributor to the *Psychological Journal*, &c. He was a very efficient superintendent, and under his care and management the Richmond Lunatic Asylum has become a model institution of its kind.

MEDICAL MAGISTRATES.

Dr. Ryan, of Emly House, Tipperary, who was lately appointed to the Commission of the Peace, served through the Franco-Prussian War in the Anglo-American Ambulance. Dr. Charles Edward Crean, of Windsor Villa, Ballyhaunis, has been appointed to the Commission of the Peace for co. Mayo.

LONGEVITY IN IRELAND.

During the past quarter, among the deaths registered were the following at very advanced ages—viz.: One at 101, one at 102, two at 103, one at 104, and one at 112 years respectively.

Dr. Hugh Brosnan, of Castleisland, in the county of Kerry, has been committed for trial at the next assizes for alleged complicity in a Whiteboy offence.

Dublin, Aug. 24th.

BELFAST.

(From our own Correspondent.)

BELFAST ROYAL HOSPITAL.

FROM the report read at the quarterly meeting of this charity on Monday we gather that during the past quarter there were 502 intern patients, while during the same time there were treated as extern patients 3580, making the large total of 3950 cases. The total receipts from all sources to the end of July amount to £7500 18*s.* 4*d.*, but the ordinary income has not kept up with the expenditure, for when the accounts due by the hospital up to the end of July are paid there will be a deficiency amounting to £777 11*s.* 9*d.*—a deplorable state of things considering the pressure and special demands which have of late been made upon the institution in connexion with railway accidents and local disturbances. The urgency of the claims has been such that many new beds have had to be fitted up, and great expenditure was needed for the surgical treatment of the cases, and while all this has been going on there has been a diminution of support. Of the 3580 extern cases in the last quarter, the altogether unprecedented number of 3200 have been surgical, and it is estimated that the cases treated at the hospital in connexion with the late unfortunate riots have cost the board of management between £700 and £800. During last quarter Dr. Calwell (formerly house-surgeon) was appointed house-physician, while Dr. Shuldham Dunlop was elected to the post vacated by the former. The two retiring members of the medical staff, Dr. Whitla and Dr. O'Neill, were unanimously re-elected. The report also states that at one of the meetings of the board they unanimously adopted the following resolution, and forwarded a copy of the same to the members of Dr. Mac Cormac's family:—"That the board record their high appreciation of the character and services of the late Dr. Mac Cormac, who for many years acted as one of the physicians of the hospital, and up to the time of his death was one of the consulting staff. They bear willing testimony to his great ability and concientiousness, and desire to express their sympathy with the members of his family in the great bereavement they have experienced."

ELECTION OF SENATOR OF THE ROYAL UNIVERSITY.

A vacancy having recently occurred in connexion with the Senate of the Royal University through the death of Dr. Curtis, an active canvass is taking place for the position, and a correspondence has been going on in one of the local papers. There are two local candidates, both members of the medical profession—Dr. W. K. McMordie, physician to the Samaritan Hospital, and Dr. Whitla, physician to the Royal Hospital. Mr. Farrelly of Dublin, and it is said Captain Fitzgerald of Cork, are also candidates. Dr. McMordie has issued an address for the post of elected representative to the General Medical Council. I hear of no other local candidate.

Belfast, Aug. 24th.

PARIS.

(From our own Correspondent.)

THE ACTION OF THE AIR AT CERTAIN ALTITUDES ON PULMONARY HÆMORRHAGE.

WITH reference to your editorial note of the 5th inst., on the *Rationale* of the High Altitude Treatment of Phthisis, a paper lately communicated to the Société Française d'Hygiène, by Dr. Deligny, on the Action of the Air at certain Altitudes on Pulmonary Hæmorrhage, may be of some interest. The paper began by citing Professor Lombard, of Geneva, who had brought to notice the fact that, in phthisical subjects, hæmorrhage is rarer at a certain altitude than on the plains. The same fact was noticed by Brehmer, Weber, and Kuchenmeister; and Prof. Jaccoud, in his clinical lectures, has laid down as a principle that hæmoptysis, or a tendency to it, is favourably influenced by occupying certain altitudes, and that they are in these cases of some utility. Dr. Deligny goes on to explain the action of mountain air as follows:—"From a height of 2000 feet to 3000 feet, the higher one ascends the more the air of the mountains modifies the functions of the circulation and of respiration, which is the consequence of the diminution of atmospheric pressure, the lowering of the temperature, and also of other factors which are of less importance. Upon the side of the respiration there is an augmentation of the pulmonary capacity, an enlargement of the thoracic cavity, and an acceleration of the expiratory movements. The respiration is more ample, the inspirations are more profound; in short, the entire lungs fully perform their function. This circumstance has been adduced to explain the immunity from phthisis which inhabitants of mountains enjoy. On the side of the circulation there is, as a first phenomenon, an acceleration of the beats of the heart, followed by an afflux of blood to the periphery, and turgescence of the cutaneous capillaries, indicated by a more intense colouration of the mucous membranes, as may be seen in those of the mouth and of the tongue. From this cutaneous congestion and the afflux of blood to the peripnery result, according to Professor Jaccoud, an anæmia of the viscera, which, however, is relative and slight, and is marked by symptoms rather favourable than otherwise; the cerebro-spinal functions are more active, more easily performed;

the respiration is easier; the power of locomotion is increased. The lungs participate in this anæmia of the viscera, and the circulation of the organ is thus relieved, the tendency to pulmonary congestion is less, and even the pre-existing congestion disappears. This action of the air of high altitudes on the circulation would explain its anti-hæmorrhagic effects. It has been asserted that a sojourn in a brisk and cold air facilitates pulmonary congestion. This is perfectly true for the cold and damp air of the plains, but the contrary is observed for altitudes, the air of which is cold and brisk, but remarkably dry. To ensure the anti-hæmorrhagic action of the air of great altitudes certain conditions are necessary before any appreciable effects can be produced. In the first place the altitude appropriate to individual cases must be taken into consideration. Professor Lombard divides mountain climates into two categories—1. Climates that are more sedative than tonic, which may be found at an altitude of from 2000 to 3000 feet. 2. Those that are more tonic than sedative, at an altitude above 3000 feet. The next condition necessary is acclimatisation, the period of which should depend on circumstances, and invalids should never be removed direct from the plains to the higher regions, but this should be done by stages before they proceed to the highest point prescribed above in order to avoid the risks already referred to. Acclimatisation is therefore an important element in the application of climatic therapeutics of altitudes. This opinion is in accord with that expressed by Professor Jaccoud. But while mountain air is favourable to pulmonary hæmorrhage, it would be injurious in hæmorrhages from the intestines, the stomach, and the uterus.

A CURIOUS CASE OF CATALEPSY.

A curious case of lethargy in a female patient at the Salpêtrière is just now causing great sensation in Paris. The patient is forty-seven years of age, and, without any apparent cause, fell into a profound sleep, from which she awoke after eighteen days. During this sleep the respiration of the patient was very irregular. Insensibility was almost complete; one could thrust needles into her skin without provoking the slightest manifestation of pain. She was nourished with milk, bouillon, and eggs. Eudoxie Hedouin, which is the patient's name, is one of the oldest *pensionnaires* of the Salpêtrière, where she was admitted in 1862 with hemiplegia of the left side, and since that time she has never walked. She is of extraordinary *embonpoint*, and at one time weighed 140 kilogrammes, or nearly 309 lb. avoirdupois. On awaking from her sleep last week she was seized with a violent nervous trembling, which was accompanied by burstings of hysterical laughter lasting about ten minutes. She then opened her eyes, and said "Bon jour" to someone whom she took for her mother, and never uttered another word on the first day. At the visit on Friday last she was offered an empty glass, making her believe that it was filled with champagne. At three different times, in putting the glass to her lips, she imagined that she had been drinking from the glass, and then manifested all the symptoms of inebriation; but on offering her a piece of aloes and trying to persuade her that it was sugar, she made a significant grimace on tasting it. During her sleep, Dr. Voisin, in whose ward she is, performed on her a most curious experiment. Without uttering a word in presence of his pupils, the doctor placed in the first instance on the chest of the patient a small packet containing tartar emetic, where he left it for a few minutes, and then replaced it by another packet in which there was nothing. Then, addressing his audience, he said in a loud voice: "You will see, gentlemen, the effect which the tartar emetic is going produce by simply placing it on the epidermis of the patient. In five minutes nausea and vomiting will appear." Accordingly, at the expiration of the time, the predictions of the doctor were realised. It must, then, be concluded that the patient, in spite of her sleep, heard what the doctor said. Since she has awakened she does not seem to be quite conscious, but drinks, eats, and sleeps as at ordinary times.

M. CHEVREUL.

The popular fêtes that are being organised to celebrate the hundredth birthday of M. Chevreul at the end of this month, as already reported in THE LANCET, are assuming more of a national character, as the official authorities and the public are vying with each other to do honour to the illustrious centenarian. On August 31st a grand banquet is to be given at the Hôtel de Ville by public subscription, after which there will be a grand military procession, with lighted torches and music, which will pass through the principal streets of Paris. On the morning of September 1st the inauguration of the buildings annexed to the Museum of Natural History will take place, under the presidency of the Minister of Public Instruction, when a statue of the champion of the day will be unveiled, and a eulogy will be pronounced by one of his colleagues, probably M. Frémy, the present director of the Museum. On the same day will be also opened at the Museum an exhibition recalling the discoveries of M. Chevreul, and their applications to industry. On Monday, the 30th inst., a special representation is to be given in his honour at the new Opera House, for which he has received an express invitation, which has been accepted by him. I learn that he has never been to the new Opera, and indeed he has never entered a theatre for the last twenty years. The presence of such a man under such circumstances is rather unique in the annals of history, and it is to be hoped that the venerable chemist will possess sufficient vitality to be able to resist the excitement caused by the demonstrations made in his favour.

Paris, Aug. 25th.

EGYPT.

(From our own Correspondent.)

GREAT FAIR AT TANTAH.

THIS festival, held every August in honour of a Moslem saint of great renown who lived in the thirteenth century is now drawing to a close, after nine days and nights of superstitious reverence and dissipation and revelry. Arabi's rebellion and the cholera epidemic have prevented this fair from taking place since 1881, though an impromptu gathering of large dimensions was brought together last year. This year the villagers, who are the chief visitors, flocked in great numbers to say a few prayers at the tomb of the saint, buy and sell cattle, and pass the rest of their time in pleasure, with little restraint. The numbers are said to have risen this year to 500,000, and this would seem possible, for there have been 8000 native marquees, each sheltering about fifty people, besides all the small tents of the fair and the men who sleep and live in the streets. Tantah has a population of about 60,000, and a daily mortality of five or six. It is remarkable that so great an influx of natives has not raised the death-rate. This is partly due to the tents being pitched on open ground, and to the measures enforced recently by the sanitary department. A native sanitary inspector and four assistants had divided the town and pilgrims into sections. They paid them constant visits, established latrines where necessary, cleaned the mosques, and attended generally to the conservancy arrangements. The feeding of this large mass of men is of no trouble to the State, for each family brings its own commissariat on camel or donkey back, but a brisk trade was being carried on in "popcorn" and sweetmeats, for which the fair is famous. Hasheesh (cannabis indica) tents were crowded with solemn, rather unhappy-looking devotees, who were cautiously furnished with the forbidden drug by the attendants with many mysterious nods and winks. No smoker took more than one inhalation, and then passed the pipe on to his friends, and afterwards to the poorer members of the fraternity. Most men can take fifty or more inhalations during an evening, and are then prepared to thoroughly enjoy any wit or punster's efforts, or are wafted into the sensual dreamland common in Egypt. Much native music and singing was to be heard in other tents, and the facial grimaces on the part of the men and the wonderful movement of the women's thoracic and abdominal muscles, which is usually called dancing, were very popular. Besides the absence of Europeans and the effendi class of natives, another remarkable feature is the presence of veiled women sitting with men in the cafés.

THE ONLY ARABIC MEDICAL PAPER.

Egypt boasts of only one medical journal, *El Shifaa* (The Cure), which was started last February, and so far has been a great success. It is published monthly, the price being 1*s.* 4*d.*, at the offices of a native scientific paper, and

is edited by a Syrian in Cairo—Dr. Shemeil—and Dr. Milton. At its start the sanitary department offered to buy 120 copies and distribute them among their officials; but as it was at once found that the native doctors brought its circulation up to 400, the offer was declined. It already pays its way, and will, it is to be hoped, be of incalculable benefit to provincial doctors possessing no modern medical literature. The chief contributors are natives of Egypt and Syria, and Dr. Milton, besides publishing many hospital cases, is now writing on the Treatment of Wounds. Dr. Kartulis of Alexandria has recently contributed a paper on the Giant Amœbæ, which he maintains are specific of dysentery.

ENGLISH TROOPS IN EGYPT.

Malaria is almost unknown in Cairo, but cases occasionally occur at this time of the year, when the Nile is rising and inundating the fields. The Welsh regiment, which came here from Mauritius and the Cape of Good Hope, has suffered much lately, both from a paroxysmal fever of malarious type and from a continued fever, which is uninfluenced by quinine. The regiment has been moved from the river bank to barracks on the edge of the desert.

Cairo, August 14th.

TURKISH HOSPITALS AT CONSTANTINOPLE.

FROM A CORRESPONDENT.

(*Concluded from page 192.*)

THE Constantinople correspondent of the *Journal des Débats*, whose interesting description of the foreign hospitals in the Turkish capital I brought before your readers the other day, expresses himself as being very agreeably surprised at finding the Turkish hospitals themselves admirably managed and scrupulously clean. The only exception is in regard to the Bimar Hané, or hospital for the insane. This asylum is at Scutari, the building having been used as barracks for the soldiers of the Sultan Mahmoud, but converted into a lunatic asylum fifty-five years ago by Dr. Mongeri, who was the first physician in Turkey to substitute kind treatment for the brutality of which the insane were formerly the victims. The establishment of Bimar Hané is, however, very deficient in comfort, there being only two dormitories, containing about 150 beds, in which the unfortunate patients are huddled together, many of them having to sleep two in a bed. They have nothing in the way of clothing but a shirt, a pair of drawers, and a cotton cap, and there is no covered courtyard for them to take exercise in. They are supposed to have two meals a day, consisting of vegetable soup and pilaff, but the correspondent of the *Débats* describes the food as insufficient in quantity and poor in quality. There are few dangerous lunatics among the men, and the listlessness of mind and body which is always the chief characteristic of the Turk seems in this asylum to reach its maximum of intensity. There are, however, many cases of hysterical insanity among the women, though the negresses at Bimar Hané, who are rather numerous, seem to be immersed in gloomy reflections, as if longing for the burning sands of their desert. There are at the present time 450 men and 170 women, including 70 Christians, in the asylum, and the annual cost of this establishment is £11,600, of which a third is supposed to be contributed by the Government. This subsidy is, however, paid with Turkish punctuality, and the remainder is made up by grants from the different provinces, in accordance with the number of insane from each under treatment there. There are three doctors attached to the asylum, receiving salaries, one of £20, the two others of £7 a month, while there are 50 keepers and attendants, whose pay is only 16*s.* a month. The mortality is about 14 per cent., and the correspondent of the *Débats* adds that when he visited the asylum there were no fewer than 70 patients in the infirmary suffering from intestinal complaints.

The Gourabat Hospital, also called the Charity Hospital, is in striking contrast to the above; and it would be difficult to find a better managed establishment than this, which is under the charge of Ahmet Pasha, who followed his medical studies at Constantinople, and is thoroughly conversant with the progress of modern science. This hospital, situated at Stamboul, was built about forty years ago by the Sultana-Validé, mother of the late Abdul-Aziz, who took the greatest interest in it. A set of scales is shown to visitors in the pharmacy, which have a piece of string attached to them by the sultana, who removed a small silver chain, saying that "she would not have anything showy in the place." The Gourabat Hospital is a large quadrilateral building of only one storey, around the inside of which is a covered gallery with a garden in the centre. On to this gallery open 22 dormitories, each nearly 40 ft. square by 16 ft. high, well ventilated, and containing altogether 300 beds. Each bedstead is of iron, with curtains, two mattresses (one stuffed with maize and the other with wool), two pillows, and two blankets. Only male patients are received, and there is no restriction as to the nature of their complaint. The staff consists of the chief physician, Ahmet Pasha, three house-doctors, four surgeons, a pharmacist, and 51 nurses and attendants, the chief physician having the rank of brigadier-general; the others of colonel, with pay in proportion. The income of the hospital is about £12,000, derived from the rent of house property belonging to the foundation, and the expenses are about £7000, exclusive of the pay of the staff. Of the 4738 patients who passed through the hospital, 473 died, the rate of mortality being about 10 per cent. Out of the number of deaths, 125 were from fever, 113 from diseases of the chest and lungs, 102 from abdominal complaints, 76 from external or cutaneous complaints, and 57 from diseases of the brain. More than 10,000 gratuitous consultations are given in the Gourabat Hospital every year; and the correspondent of the *Débats* was much struck by the respectful attitude of the patients towards the staff, and by the absolute silence which prevailed throughout the dormitories.

The Hasseki Hospital is for females, and contains 120 beds, all of which are gratuitous except six, for which a charge of rather less than 2*s.* a day is made. The Hasseki Hospital is also at Stamboul, a magnificent konak, or villa, having been purchased two years ago for about £60,000. There s a ward with ten beds for women about to be confined, one of six beds for ophthalmic complaints, two of six beds each for children, while the rest are for general complaints. Three doctors and 25 nurses and attendants are attached to this hospital, the annual expenditure of which is about £4000, contributed by the municipality. The number of patients received last year was 596, of whom 111 died. There are eight military hospitals, with 3000 beds, the most important being the Naval and Seraskeriat Hospitals. The hospital of the navy is a magnificent building, situated upon the Golden Horn, with two storeys each, having thirty windows upon the façade. It contains 500 beds, distributed over 25 wards, the mortality being only 2 per cent., as the hospital only keeps the patients who can be cured, all the incurable cases being discharged. The management of the hospital is excellent, there being five doctors belonging to the different religions, besides 100 attendants all taken from the navy. The wards and beds are of irreproachable cleanliness, and a variety of naval engravings and models of ships are displayed upon the walls, in order to amuse the patients. The kitchens and pharmacy are beautifully clean, and no fewer than 7889 persons passed through this hospital last year, all the expense being borne by the Minister of Marine.

The Seraskeriat Hospital is a building of two storeys, containing 160 beds distributed over five wards, one of which has ten beds for officers. There are ten army doctors attached to it, one of whom, Mikaël Bey, ranks as a colonel. As at the Naval Hospital, the cleanliness and general management leave nothing to be desired, and the correspondent of the *Débats* can vouch for the fact that the food supplied is most appetising. The rate of mortality is very low, and as the Seraskeriat Hospital is the central one, its pharmacy is of great importance, more than 600 prescriptions being made up daily. Last of all comes the Miskin Hané, or Lepers' Hospital, at Scutari, which was founded by the Sultan Selim, and for a long time received a Government subsidy of twenty piastres a month for each patient. This sum is now insufficient, and the hospital, to which Dr. Zambaco devotes so much attention, is dependent upon casual charity. The Miskin Hané is the centre of the vast cemetery in which so many million bodies have been interred, so that the lepers are literally enclosed within a living tomb. The hospital is a quadrilateral about 120 feet long, and with one storey. There are only twenty rooms for the twenty-seven patients, who drag out a wretched existence in the most abject misery, only relieved by the devotion of Dr. Zambaco, who believes that leprosy is not contagious, and who comes twice a week, handling the lepers with perfect impunity

MEDICAL NOTES IN PARLIAMENT.

Alleged Flogging at Hanwell.

IN the House of Commons on the 20th inst., Mr. Ritchie, in reply to Mr. Pickersgill, stated that his attention had been called to what, on the face of it, seemed to be the very cruel treatment of an inmate of the Hanwell Pauper Schools, and before deciding what course to adopt with reference to it he had thought it desirable to call for any explanation the drill instructor might have to offer upon the question, and he had also asked the guardians and managers of the school to favour him with any observations they had to make as to the statement that there was an unnecessary amount of flogging at the school. Mr. Ritchie added that the rules and regulations as to corporal punishment at these schools are very stringent, and under no circumstances whatever does it fall within the duty of a drill instructor to inflict corporal punishment.

The River Lea Committee.

Sir Charles Russell moved that the Select Committee of the last Parliament to inquire into and report upon the condition of the River Lea, and to make such recommendations as may appear necessary, be reappointed. The Chancellor of the Exchequer said that the Government would facilitate the reappointment of the committee on the earliest possible day next session, it not being possible that real progress could be made with the subject at the present time. Sir Charles Russell expressed his satisfaction with the statement, and did not press his motion, which was accordingly withdrawn.

Irish Lunatic Asylums.

A Bill to amend the law relating to private lunatic asylums in Ireland was brought in by Mr. W. Corbet, and read a first time.

Ventilation of the House.

On the 23rd inst., on the motion of Mr. Jackson, the Committee on the Ventilation of the House was reappointed.

Medical News.

BRITISH MEDICAL SERVICE.—The following is a list of candidates who were successful for appointments as Surgeons in the Medical Staff of H.M. Army at the competitive examination in London on Aug. 9th and following days:

Morgan, F. J.	3180	Gray, W. L.	2380
Hale, C. H.	3050	Salmon, L. E. A.	2370
Burnside, E. A.	2895	Holt, M. P.	2360
Poole, W. C.	2870	Steill, D.	2360
Horrocks, W. H.	2830	Morgan, J. C.	2340
Raymond, G.	2765	Weir, C. J.	2330
Thurston, H. C.	2760	Hinde, A. B.	2325
Reily, A. Y.	2660	Bullen, J. W.	2320
Scott, B. H.	2655	Inniss, B. J.	2310
Wade, G. A.	2655	Penton, R. H.	2310
Hore, H. St. G.	2650	Thacker, R. C.	2300
Watson, A. C.	2620	Pocock, H. J.	2290
Julian, D. K. A.	2610	Young, C. A.	2265
Corcoran, E.	2560	O'Brien, M.	2240
Cockerill, J. W.	2540	Hassard, E. M.	2235
McCullock, J. C.	2500	Hilliard, G.	2235
Macdonald, S.	2495	Murphy, W. N.	2200
Ritchie, J.	2490	Elliott, C. K.	2150
Gray, E. W.	2470	Clark, S. F.	2110
Minniece, J.	2460	Sinclair, F. C.	2090
Browne, E. G.	2380		

INDIAN MEDICAL SERVICE.—The following is a list of candidates for appointments in this Service who were successful at the competitive examination held at Burlington House on Aug. 9th and following days:—

Macnamara, R. P.	3165	Sellick, J. H.	2330
Pilgrim, H. W.	2970	Hare, E. C.	2490
Swinburne, J. McD.	2770	Clarkson, F. C.	2480
French, G. B.	2740	Castor, R. H.	2470
Thomson, F. W.	2735	Morris, H. M.	2470
Hall, G. C.	2730	Maidment, F. G.	2400
Henderson, S. H.	2715	Doyle, J. P.	2370
Green, C. R. M.	2710	Blancard, J. T.	2350
Dyson, J. E.	2650	Hall, E. A. W.	2340
Bensley, C. N.	2630	Scotland, D. W.	2340
Brown, E. H.	2620	Morwood, James, M.D.	2330
Grayfoot, B. B.	2570	Russell, A. R. P.	2315
Jordan, J. G.	2570		

Thirty seven candidates competed for twenty-five appointments. Thirty-three were reported qualified.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Thursday, the 19th inst.:—

Robinson, Abraham Hepworth, M.R.C.S., Manchester-road, Hodenwood, near Manchester.
Sankey, Julius Ivor, Portland-road, Notting-hill.

A DEMONSTRATION in aid of the funds of the Beckett Hospital and Dispensary, Barnsley, was held on the 22nd inst. The amount realised exceeded £62.

THE Emperor of Russia has sent 40,000 roubles to the Pasteur Institute, the total subscriptions to which now amount to £64,000.

AN inquest was held at Bath on the 23rd inst. on the body of a woman aged sixty-four, who died from shock to the nervous system caused by the sting of a wasp.

THE Caucasian Medical Society has awarded its annual prize of 100 roubles, given for the best original paper contributed to the Society during the year, to Dr. Neumann for a work on the Pendjeh Sore.

WOLVERHAMPTON EYE INFIRMARY.—Mr. Horsman, to whom Wolverhampton is indebted for its art gallery, has just given £4000 to cover the cost of providing and furnishing the in-patient department of the intended new eye infirmary. This makes the total sum already subscribed £9500 towards the £12,000 required for the erection and furnishing of the new building.

JAPANESE WATER-SUPPLY. — On the authorities making an examination of the wells of Nakamachi recently 777 out of 939 were found to be unfit for drinking purposes, and the analysis of many showed traces of sewage contamination. Such a condition of the water-supply leaves room for no surprise at the statement that cholera has taken root in many places in the country.

HUDDERSFIELD INFIRMARY.—Messrs. John Brooke and Son have intimated to the president of this institution their intention to subscribe £500 to the fund which is being raised for the erection of a new ward for children and other extensions of the infirmary. The sums already promised amount to £3350, which is nearly one-half the amount required.

PRESENTATION. — On the 12th inst. a testimonial was presented to Mr. W. H. Thornton, M.R.C.S., on behalf of the vicar, churchwardens, and parishioners of the parish of Holy Trinity, Margate, on his retirement from the office of churchwarden, which he has filled for the long period of thirty-two years. The testimonial took the form of a silver teakettle and lamp, the former bearing a suitable inscription.

WEYMOUTH SANATORIUM. — At the thirty-eighth annual meeting of the supporters of this institution on the 19th inst., it was reported that the number of in-patients under treatment during the year had been 208, and of out-patients 863, making totals of 2621 and 35,560 respectively since the opening of the institution in 1848. The financial condition of the sanatorium continues to be satisfactory.

DEATHS OF M. PASTEUR'S PATIENTS.—A little boy residing at Rawtenstall, in Yorkshire, died on the 20th inst. from hydrophobia, having been bitten about six weeks ago. Within nine days after the injuries had been received he was treated by M. Pasteur, during his ten days' residence in Paris receiving thirteen inoculations. At Ferrol and Reus a woman and a man have also died from the disease; the sufferers in both these cases, too, had undergone a course of treatment in Paris under M. Pasteur.

THE DISPOSAL OF THE BODIES OF PAUPERS.—At a meeting of the Spalding Board of Guardians on the 23rd inst., a motion to secure the abandonment of the practice of forwarding the bodies of persons who die in the workhouse, and who have no relatives, to hospitals or colleges for dissection, was introduced, and it is expected that at the next meeting of the Board the minute relating to it will be rescinded. This action has been taken in consequence of the body of a labourer who died in the workhouse apparently without friends, having been sent to the Cambridge School of Medicine. The relatives, indignant at such a disposal of the corpse, aver that they would have buried it had inquiries been made.

IN connexion with the meeting of the British Association on Wednesday next, an Industrial Exhibition has already been opened, which, though limited to towns within a radius of fifteen miles, will, it is expected, be of an attractive character.

GELOSINE.—In the "Bulletins et Mémoires de la Société de Thérapeutique" (Paris, July 15th), M. Guérin published a communication on gelosine, a mucilaginous principle which he has extracted from the *gélose* of Gelidium corneum, an alga of Japan. It is an amorphous, uncrystallisable, colourless, non-azotised substance, closely resembling lichenine of the lichens and fucine of the algæ. It is also similar to the pectose of ripe fruits which determines alimentary vegetable jellies. Gelosine is dissolved in boiling water, of which it solidifies about 350 times its volume. To give an idea of this very great suspensive power, 250 grammes of gelosine immobilise 250 litres of water. On cooling, this solution is transformed into a fine transparent jelly, capable of assuming any shape and varying consistence. Therapeutically this jelly constitutes a valuable new excipient: salts, acids, powders, and extracts may be dissolved in it and dispensed in any desired form. The price of gelosine is so moderate that it may be used in hospital practice, and, when properly sterilised, it promises to be of use in the researches of micro-biologists. As the substance is inalterable, it may be melted indefinitely with very little loss.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

HORNE, THOMAS, L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Stockton District and the Workhouse of the Stockton Union.

LITTLEWOOD, HARRY, F.R.C.S.Eng., has been appointed Resident Surgical Officer to the General Infirmary, Leeds, vice F. H. Mayo, resigned.

WHITE, ERNEST A., M.R.C.S., L.R.C.P.Lond., has been appointed Medical Officer for the Fifth District of the Leeds Union.

Births, Marriages, and Deaths.

BIRTHS.

CAPON.—On the 22nd inst., the wife of Herbert J. Capon, M.D., of a son.

FINLAY.—On the 21st inst., at Dalkey, co. Dublin, the wife of Surgeon-Major Finlay, Medical Staff, of a son.

GOLDSMITH.—On the 28th ult., at Sutna, Central India, the wife of Surgeon-Major S. J. Goldsmith, of a son.

JOHNSTON.—On the 15th inst., at Guisborough, Yorkshire, the wife of George F. Johnston, M.B., of a son.

MARRIAGES.

BARTON—LAURENCE.—On the 19th inst., at Walesby, Edwin William Barton, M.D., of Market Rasen, to Helen Isabel, eldest daughter of the Rev. Perceval Laurence, Rector of Walesby.

PRICE—PAGE.—On the 24th inst., at St. Stephen's, Hampstead, John Alfred Parry Price, M.D., of Reading, to Frances Mary, eldest daughter of J. Bentley Page, Esq.

THIELE—DIXON.—On the 15th inst., at St. John's Church, Chatham, Herman Thiele, M.B., C.M., Surgeon, M.S., to Louisa Frances Kate, youngest daughter of S. R. Dixon, Esq., of Hastings, Sussex.

TOBIN—COSTELLO.—On the 17th inst., at the Church of St. Agatha, North William-street, Dublin, R. F. Tobin, Brigade-Surgeon (retired), A.M.S., to Fanny, daughter of James Costello, J.P., of Fox Hall, Raheny, co. Dublin.

WHITCOMBE—BUSBRIDGE.—On the 18th inst., at St. Mary, The Boltons, South Kensington, Philip Percival Whitcombe, M.B.Lond., to Blanche Beatrice, youngest daughter of George F. Busbridge, of The Lodge, West Malling, Kent.

DEATHS.

HAINS.—On the 22nd inst., at Bridge Town, Totnes, Devon, John Philip Frost Palmer Hains, Surgeon, aged 66.

PASH.—On the 13th inst., at Ilsbourn, Laurie-park, Sydenham, Wilson Pash, M.A., M.B.Camb.

WILLIAMS.—On the 19th inst., at Mold, William Williams, M.D., M.R.C.S., aged 68.

N.B.—*A fee of 2s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, August 26th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Aug. 20	30·29	E.	60	57	101	72	53	·11	Fine
,, 21	30·13	S.E.	59	56	110	76	54	...	Hazy
,, 22	30·04	N.E.	61	59	105	78	57	...	Hazy
,, 23	30·02	N.E.	59	57	104	76	57	...	Overcast
,, 24	29·92	N.E.	64	61	107	80	59	...	Overcast
,, 25	30·00	N.W.	64	60	108	77	60	...	Hazy
,, 26	30·07	W.	65	60	...	...	57	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

HOMŒOPATHY.

An Old True Blue asks various questions about homœopathy.—1. What is homœopathy? That is a poser. There are probably not six homœopaths in England who would accept the principles of homœopathy laid down by Hahnemann. Dr. Kidd, who is the most popular leader of the sect, says there are two principles: *similia similibus curantur*, and *contraria contrariis curantur*.—2. There is no homœopathic university in England, nor, so far as we know, in Europe.—3. There is no legal homœopathic licensing body in England.—4. Homœopathy is not the best practice according to the best science of the day, but is a fad and a fallacy.—5. The medical profession does not consider it honourable for a member holding a degree from a British university to practise homœopathy; but the law particularly forbids any examining body or other medical authority to refuse its qualifications to any gentleman on the mere ground of his holding peculiar or exclusive theories of medical practice.—6. There is nothing illegal in homœopathic dispensaries.

G.P.—The details of the case are hardly sufficiently numerous and precise to warrant us in offering an opinion upon it.

NAIL-SWALLOWING.

To the Editor of THE LANCET.

SIR,—If you consider the following worthy of insertion it may be of interest to some of your readers.

A. G——, a fine little fellow of four years of age, picked up a large brass-headed nail, two inches long, and commenced sucking it, when suddenly it slipped from his fingers down his throat. When I saw him, half an hour after, he was looking very pale and anxious, complaining of great weight in the stomach, and a feeling of sickness, which remained for three days, passing off and leaving the child, to all appearance, in perfect health. Four days after, just seven days from the time of the accident, the nail was voided, embedded in a hard mass of fæces. The treatment was from the first perfect rest, and the bowels confined with a mixture of two minims of solution of morphia and five minims of dilute sulphuric acid, every three hours.

I am, Sir, yours faithfully,

Colebrooke-row, City-road, N., August, 1886. J. W. SMYTH.

NEW POLISH MEDICAL JOURNAL.

THE *Przegląd Lekarski* states that the new Polish medical journal, *Wiadomości Lekarski*—i.e., Medical Gazette—will be devoted chiefly to abstracts from foreign journals, including the Russian ones.

Mr. Bellamy.—Very shortly.

JEWS AND MEDICAL PRACTICE IN RUSSIA.

THE Russian Medical Department has been collecting statistics showing the number of Jews who are practising medicine, pharmacy, &c. It seems that in Odessa there are of such 99 doctors (including 6 women), 3 veterinary surgeons, 9 dentists, 35 midwives, 10 feldshers, 19 apothecaries, and 4 apothecaries' managers—altogether 178. It is feared that the authorities contemplate making an order limiting the proportion of Jews allowed to engage in civil practice, in the same way as those in the military medical service are limited to a tenth of the whole.

Duz.—We see no reason why our correspondent should put himself on his defence in the circumstances mentioned. The change of mind was on the other side. He fulfilled all his engagements, and may rest satisfied with the *mens conscia recti*.

Mr. G. R. Newcastle.—We cannot depart from our rule.

THE DRAINAGE AND SEWAGE DISPOSAL OF LONDON.

To the Editor of THE LANCET.

SIR,—To drain London thirty years ago was looked upon by the uninitiated who had never studied sanitation as a somewhat gigantic affair. Mr.—afterwards Sir Joseph—Bazalgette had been elected Road Surveyor to the Metropolitan Board of Works, and to him belongs the credit of carrying out the work—a work which all admit has been very well done, according to what London was at the time. The first mistake was that he did not foresee and comprehend what London was to be in after-time. The result has been the ever-increasing pollution of England's noblest river, and the accumulation of a mass of filth, defying all the wisdom of the Board of Works to know what to do with. Yet, the remedy is as certain as that the Board of Works do not understand it, or with intensified obstinacy will not see it. When our Belgian, Colonial, and Indian visitors recently inspected the sewage works at Crossness, they must surely have been astonished that the discharges of fifty square miles of a thickly-populated district had to be received nearly thirty feet below mean high-water mark, and then at enormous expense of machinery and coal had to be pumped the same height again to be discharged into the river, after being treated by chemical means to decompose and unfit it for agricultural use, when the same or less amount of money differently spent would have made it a valuable commercial commodity. Those gentlemen could not have been much impressed with the value of the engineering and chemical skill that could perpetrate such a blunder. London, however, will in time be brought to see that as one mistake often generates another to remedy or conceal the first, so the first palpable deficiency in the scheme of Sir Joseph Bazalgette will necessitate a change in both drainage and sewage disposal that will be more or less expensive to complete, according to the time wasted in having it done.

I am, Sir, your obedient servant,

Batoum Gardens, W., Aug. 22nd, 1886. W. HEMPSON DENHAM.

Mr. Samuel Constable.—We think the action of the chemist was uncalled for; but it is scarcely worth while for a medical man to hold a dispute with a chemist on such a question.

Mr. E. S. Puttison.—Gastein, Kissingen, and indeed the majority of the German baths treat the condition named.

"THE USE OF COCAINE IN CIRCUMCISION."

To the Editor of THE LANCET.

SIR,—In reply to Dr. Hett's letter, which appeared in your issue of the 21st inst., will you permit me to point out that the elongated prepuce to which he refers is usually (if not always) a result of the neglected phimosis. If therefore the manœuvre I suggested be performed as soon as the child is found to have trouble in micturition, Dr. Hett's plea for circumcision will rarely, if ever, be valid. I feel by no means sure that, provided the phimosis be remedied, a long prepuce will cause any inconvenience at all; and I think we should be sure we are on very safe ground before we counsel any attempts to improve upon nature by mutilation. But Dr. Hett makes the strange remark that retraction of the elongated prepuce for purposes of cleanliness will be prejudicial to the *morale* of the child. Upon this principle it were well to inculcate the universal practice of circumcision. For, I take it that every male child should have its prepuce retracted from time to time, whether there be phimosis or not, and the parts carefully washed. To assert, then, that a proper act of sanitary cleanliness can possibly prejudice the mental or bodily well-being of the little boy is to me very startling doctrine indeed. I am, Sir, your obedient servant,

Norfolk-terrace, W., Aug. 25th, 1886. HERBERT SNOW.

PSORIASIS SOLARE.

To the Editor of THE LANCET.

SIR,—Could any of your readers suggest a remedy for psoriasis solare? There is no specific history, but the patient's grandmother suffered from the malady. It appears all over the body. The usual remedies have been tried—arsenic, iodide of potassium, chrysophanic acid ointment, &c. Has anyone found good results from Barff's boro-glyceride? If so, I should be glad to know the method of application, &c. Any other suggestion would be greatly esteemed.—I am, Sir, yours obediently,

Aug. 21st, 1886. HOUSE SURGEON.

THE PREPARATION OF SKELETONS.

AN account has recently been published of a novel industry, to which a large manufactory in the suburbs of Paris is devoted—viz., the preparation of skeletons for the market. The proprietor contracts for a supply of corpses from all the dissecting-rooms and hospitals in the city, and the raw material on its delivery is boiled for days in a cauldron. The grease which rises to the surface is skimmed off and sold; the bones are carefully cleaned and bleached in the sun, and finally assorted and converted into articulated skeletons. The preparation of frogs, lizards, and various reptiles occupies a separate department. The comparative cheapness and abundance of the skeleton supply from Vienna since the Russo-Turkish War has somewhat depressed the trade; but really good osteological preparations, as might be expected, always command a good price. For what purpose the grease which is sold is used is not stated, though we hope the silence is not to be regarded as significant.

R. N.—1. The examination of Englishmen for the degree of Brussels is through an interpreter in the English language.—2. The degree is not at present registrable in England, but may become so under the new Medical Act.—3. At St. Andrews, if holding British qualifications and above the age of forty.

Mr. J. Young.—The omission was corrected in our last issue, p. 380.

EXTRAORDINARY CASE OF NEGLECT.

To the Editor of THE LANCET.

SIR,—As showing to what a condition humanity may sink when surrounded by filth, drunkenness, and moral degradation, and because it has never previously fallen to my lot to witness such a case, I send the following.

At midnight on Friday last I received a note from the coroner of the district, requesting me to make a post-mortem examination on the following morning of the body of a girl aged nine years, the daughter of a tramp, who had died in a field at Swalecliffe about 2.30 that afternoon. The body lay in a barn, and upon entering a horrible sight presented itself. Innumerable maggots were crawling in all directions from the back of the head, and upon moving the body the entire mass of matted hair fell off, leaving the scalp as though it had been shaven. At the back of the neck was a large opening, through which could be distinctly seen the skull, stripped of its pericranium, and the entire space filled with a teeming mass of maggots; none were visible on any other part of the body. The day before her death the child had fallen down in a fit, for which brandy was administered, when she revived, and afterwards walked a distance of two miles. The next day she had two more fits, in the second of which she died. As the child had received no medical attendance, all that could be gleaned of her history was that she had measles four years ago, since which she had sores on her head; so that it seems probable that these sores, being neglected, formed a nidus for the fly, the larvæ of which exactly resembled those found on fly-blown meat. I am, Sir yours truly,

Whitstable, Aug. 25th, 1886. JNO. W. HAYWARD, M.R.C.S.

THE METROPOLITAN POOR-LAW MEDICAL OFFICERS.

THE Metropolitan Poor-law Medical Officers, instead of benefiting to the extent of only £18 a year, as stated by error in our last issue, have gained from the Metropolitan Poor Act, 1867, £18,000 per annum, this sum being wholly independent of what has been saved by the fact that they do not now find medicines or persons to dispense them—i.e., they get their salaries without deduction of any kind.

Mr. Edward C. Kingsford might with advantage apply to Moore and Co., 125, Houndsditch.

Mr. William Tebb.—We must decline.

TREATMENT OF STOMATITIS.

To the Editor of THE LANCET.

SIR,—Would any of your readers be good enough to advise me as to the treatment of a lady, aged thirty-five, who suffers from very frequent attacks of stomatitis, occurring in patches on the mucous membrane of the mouth, tongue, and œsophagus. The parts are red, raw-looking, and feel hot and sore. She has no appetite, and little sense of taste. Each attack comes on rapidly, and continues about a week; then she is almost well for a few days. Nitrate of silver, sulphate of copper, lime, tar capsules, &c., with regulation of diet and attention to general health, have been tried in vain. She becomes worse. For years she has been subject to severe sick headaches. I am, Sir, yours truly,

Aug. 19th, 1886. M.B.

SUBCUTANEOUS INJECTIONS OF MERCURY IN SYPHILIS.

To the Editor of THE LANCET.

SIR,—There is a slight error in Mr. Bloxam's paper on "The Treatment of Syphilis by Subcutaneous Injections of Mercury." Twenty minims of the solution he uses contain one-fourth of a grain of perchloride, not one-third. I am, Sir, yours faithfully,

Mary Abbott's-terrace, W., Aug. 21st, 1886. JAMES LATTEY.

ERRATUM.—In the Manchester letter last week, p. 377, fifth line from the bottom of first column, for "medical" read *educational*.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir Joseph Fayrer, London; Dr. Cullingworth, Manchester; Dr. Herbert Snow, London; Mr. Bellamy, London; Dr. Pearse, Haslemere; Mr. Wetzel; Mr. W. Curran, London; Miss Mason, London; Messrs. Pratt and Co., London; Dr. Cherton, Leeds; Mr. Hopkins, Bath; Dr. Elliott, Aylesbury; Mr. St. Dalmas, Leicester; Mr. Saunders, Bromsgrove; Dr. Gay, Leamington; Mr. Moulding, Clotham; Mr. Furneaux, Shanklin; Mr. Cookson, Hendon; Dr. Reid, Staffs.; Messrs. Heard and Sons, Truro; Mr. C. Benson, Wiesbaden; Messrs. Newbery and Sons, London; Mr. Meadows, Hastings; Dr. Sinclair, Dundee; Mr. J. Weller, Sudbury; Dr. H. E. Richardson, Birkenhead; Dr. Emile Martin, Marseilles; Mr. G. M. Foy, Belfast; Messrs. Burroughs and Wellcome, London; Dr. Morris, Spalding; Surgeon G. H. Thomas, Umballa; Mr. W. H. Denham, London; Dr. Lewers, London; Mr. E. Humphrey, London; Mr. W. Tebb, London; Mr. W. Kimpton, London; Mrs. Hitch; Mr. Burgess, Manchester; Mr. W. A. Evans, Wolverhampton; Mr. T. Cook, London; Dr. Rae, London; Mr. H. Hayward; Mr. J. B. N. Cave, Mullinavatt; Dr. T. Reid; Dr. Sinclair, Dundee; Mr. E. H. Fenwick, London; Mr. C. Williams; Dr. Orton, London; Dr. Symes, Halifax; Mr. Hayward, Whitstable; Mr. P. Boobbyer, Nottingham; Dr. Macpherson, Weymouth; Dr. Burghardt, Manchester; Mr. Graham, Bristol; Mr. Boyeau, Paris; Mr. Thwaites, Bristol; Dr. Grimsdale, Liverpool; Mr. Paterson, Leeds; Mr. Walker, Pocklington; Dr. Tomkins, Leicester; Mr. Hawkins, London; J. T. M.; Lady John Manners, London; Mr. Collier, London; Clito; M.B.; R. N.; An Old True Blue; Dux; X. P.; C., Bradford.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Buchan, Plymouth; Mr. Harris, Saltburn-by-the-Sea; Mr. Furneaux, Stamford Hill; Dr. Kirwan, Galway; Mr. Kerr, Glasgow; Messrs. Cornish Bros., Birmingham; Mr. Cormoul, Dumfries; Messrs. Robertson and Scott, Edinburgh; Messrs. Loeflund, London; Mr. Williams, Liverpool; Mr. Ryan, London; Mr. Gawthorp, London; Messrs. Beal and Sons, Brighton; Mr. Telford, Bury; Mr. Hope, London; Mr. Coltman, Leicester; Dr. Skerritt, Bristol; Mr. Morse, London; Messrs. Keith and Co., Edinburgh; Mr. Walker, Twickenham; Messrs. Isaacs and Co., London; Mrs. James, Walton-on-the-Water; Mr. Harrison, Cape Town; Dr. Reynolds, Boxford; Mr. Elliott, Carlisle; Miss Turner, Southampton; Dr. Beaumont, Shirley; Mr. McLaren; Mr. Stapleton, Sheffield; Mr Hains, Totnes; Dr. Heelas, Bonchurch; Mr. Faber, Stockton-on-Tees; Mr. Huggins, Malvern; Mr. Greenwood, Liverpool; Mr. Darke, London; Mr. Vince, Birmingham; Col. Maurice, Barnstaple; Dr. Wells, Holloway; Mr. Kynaston, Folkingham; A. B.; Matron, Bournemouth; M. J. B., London; Medicus, Southport; Cantab, Bayswater; A. B., Vauxhall; Cash; R. B., Worcester Park; Alpha, Blackburn; M.D., London; Surgeon, Chilford; X. Y. Z., Leeds; A. B. C., Wantage; A. M. D., Leeds; Tibia; Beta, Upper Tooting; Junius, Woolwich; Medicus, Spondon; J. J.; R., North Kensington; J. H. W., Darwen; Kessen, Hull; A. R.; R. W., Market Overton; Box, Uttoxeter; Cavell, Wigton; F., Liverpool; Cantab., Bristol; R. P., Newport; M.B., Leicester; F. B., Leicester; J. A. D., Bridgnorth; M.R.C.S., Uttoxeter; Alpha, Holloway;

West Briton and Cornwall Advertiser, Manchester Examiner, Australasian Sketcher, Charity Record, Charity Organisation Review, Windsor and Eton Express, Dumfries and Galloway Standard, Temperance Record, Sanitary Engineering, &c., have been received.

Medical Diary for the ensuing Week.

Monday, August 30.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, August 31.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, September 1.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Tuesdays and Fridays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

Thursday, September 2.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M

Friday, September 3.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, September 4.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

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Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.